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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R2–ES–2021–0103; FXES111302WOLF0-212-FF02ENEH00]

RIN 1018–BE52

**Endangered and Threatened Wildlife and Plants; Revision to the Nonessential
Experimental Population of the Mexican Wolf**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule; availability of draft supplemental environmental impact statement; announcement of public information sessions and public hearings.

SUMMARY: We, the U.S. Fish and Wildlife Service (USFWS), propose new revisions to the existing experimental population designation of the Mexican wolf (*Canis lupus baileyi*) in the Mexican Wolf Experimental Population Area (MWEPA) in Arizona and New Mexico under section 10(j) of the Endangered Species Act of 1973, as amended (ESA). We are taking this action in response to a court-ordered remand of our January 16, 2015, final rule revising the regulations for the nonessential experimental population of the Mexican wolf. This document proposes to modify the population objective, establish a genetic objective, and temporarily restrict three of the forms of take of Mexican wolves in the MWEPA that we adopted in the January 16, 2015, final rule. We are proposing these revisions to ensure the long-term conservation and recovery of the Mexican wolf. In addition, this document proposes to maintain the nonessential designation for the experimental population. We are not proposing to revise the geographic boundaries of the MWEPA. We are seeking comment from the public on the

proposed regulatory revisions and on a draft supplemental environmental impact statement for the proposed revisions. We also announce public information sessions and public hearings on this proposed rule and the associated draft supplemental environmental impact statement.

DATES: *Written comments:* We will accept public comments received or postmarked on or before [INSERT 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**) must be received by 11:59 p.m. Eastern Time on the closing date. Due to a court-ordered deadline, we will not extend the date for public review and comment on these documents.

Public information sessions and public hearings: We are holding three public information session and two public hearings, as follows:

- On November 18, 2021, we will hold a public information session from 5:30 p.m. to 7:30 p.m., Mountain Time.
- On December 8, 2021, we will hold a public information session from 5:30 p.m. to 7 p.m., Mountain Time, followed by a public hearing from 7 p.m. to 9 p.m., Mountain Time.
- On January 11, 2022, we will hold a public information session from 5:30 p.m. to 7 p.m., Mountain Time, followed by a public hearing from 7 p.m. to 9 p.m., Mountain Time.

ADDRESSES: *Written comments:* You may submit written comments on this proposed rule and the associated draft supplemental environmental impact statement by one of the following methods:

(1) *Electronically:* Go to the Federal Rulemaking Portal: <http://www.regulations.gov>. In the Search box, enter the docket number or RIN for this rulemaking (presented above in the document headings). For best results, do not copy and paste either number; instead, type the

docket number or RIN into the Search box using hyphens. Then, click on the Search button. On the resulting page, in the Search panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on “Comment.”

(2) *By hard copy:* Submit comments by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R2–ES–2021–0103, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We request that you send written comments only by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see **Information Requested**, below, for more information).

Public information sessions and public hearings: The public information sessions and public hearings will be held virtually via the Zoom online video platform and via teleconference so that participants can attend remotely. See *Public Information Sessions and Public Hearings*, below, for more information.

FOR FURTHER INFORMATION CONTACT: Brady McGee, Mexican Wolf Recovery Coordinator, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, 2105 Osuna Road NE, Albuquerque, NM 87113; by telephone at 505–761–4704; or by facsimile 505–761–2542. If you use a telecommunications device for the deaf (TDD), call the Federal Relay Service at 800–877–8339. You may visit the Mexican Wolf Recovery Program’s website at <https://www.fws.gov/southwest/es/mexicanwolf/> for additional information about the Mexican wolf recovery effort, and <https://www.fws.gov/southwest/es/mexicanwolf/10j-revision> for information about our proposed revision.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why We Need To Publish a Rule

Under section 10(j) of the ESA, the USFWS may designate a population of an endangered or threatened species as an experimental population prior to its reintroduction. Experimental populations can only be designated by issuing a rule.

On January 12, 1998, we published a final rule (63 FR 1752) adopting regulations that designate a nonessential experimental population of the Mexican wolf. On January 16, 2015, we published a final rule (80 FR 2512; the “2015 10(j) rule”) revising those experimental population regulations based on two decades of implementing Mexican wolf reintroduction in the Mexican Wolf Experimental Population Area (MWEPA) in portions of Arizona and New Mexico. The 2015 10(j) rule expanded the geographic boundaries of the MWEPA, established new management zones with provisions for initial release and translocation of Mexican wolves, revised and added allowable forms of take, and clarified definitions. On March 31, 2018, the District Court of Arizona remanded the 2015 10(j) rule to the USFWS to redress specific components of the rule in a new revised experimental population rule (*Center for Biological Diversity v. Jewell*, No. 4:15-cv-00019-JGZ (D. Ariz.) (March 31, 2018) (“March 31, 2018, Order”). The 2015 10(j) rule has remained, and will remain, in effect while we address the remand.

What This Document Does

This document proposes revisions to the experimental population designation of Mexican wolves in the MWEPA in response to the March 31, 2018, Order. We propose to modify the population objective, establish a genetic objective, and temporarily restrict three of the forms of

take of Mexican wolves in the MWEPA that we adopted in the 2015 10(j) rule. Proposed revisions also include a new essentiality determination. We are not proposing or analyzing any changes to the 2015 10(j) rule beyond the scope of the March 31, 2018, Order. Finally, we have also updated the 2015 10(j) rule determinations with current data and information. If adopted as proposed, this rule will designate Mexican wolves in the MWEPA as a nonessential experimental population on the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations (CFR) at 50 CFR 17.11(h) with a revised rule issued under section 10(j) of the ESA at 50 CFR 17.84(k).

The Basis for Our Action

Based on the best scientific and commercial data available (in accordance with 50 CFR 17.81), we find that releasing Mexican wolves into the MWEPA, with the proposed revised regulatory provisions described in this document, will further the long-term conservation and recovery of the species. The proposed nonessential experimental population status is appropriate for the reintroduced population because we have determined that it is not essential to the continued existence of the species in the wild.

In making our finding that this rule would further the conservation and recovery of the species, we evaluate any possible adverse effects on extant Mexican wolf populations, the likelihood that the experimental population would become established and survive in the foreseeable future, the relative effects that establishment of the experimental population would have on the recovery of the species, and the extent to which the reintroduced population could be affected by existing or anticipated Federal, State, or Tribal actions or private activities within or adjacent to the experimental population area. We specifically evaluate how our proposed revisions to the population objective, establishment of a genetic objective, and revisions to the

take provisions further the conservation of the species by aligning the designation and management of the experimental population with USFWS's long-term conservation and recovery goals for the Mexican wolf. In addition, we identify the geographic boundaries of the MWEPA as defined in the 2015 10(j) rule and note that we are not proposing geographic revisions to the boundaries of the MWEPA, the management zones, or the phasing of the Arizona portion of the MWEPA. We also explain our rationale for why the population is not essential to the continued existence of the species in the wild, and we describe management restrictions, protective measures, or other special management concerns for Mexican wolves. Last, we explain a proposed process for periodic review and evaluation of the success or failure of the experimental population and its effect on the conservation and recovery of the species.

Supplemental Environmental Impact Statement

To ensure that we consider the environmental impacts associated with this proposed rule, we have prepared a draft supplemental environmental impact statement (DSEIS) pursuant to the National Environmental Policy Act of 1969, as amended (NEPA; 42 U.S.C. 4321 *et seq.*). On April 15, 2020, we published our notice of intent to prepare the DSEIS (85 FR 20967); that document opened the public scoping process under NEPA from April 15, 2020, to June 15, 2020, to seek public input on the issues under remand by the March 31, 2018, Order. We used the information gathered during scoping to inform our DSEIS and used the analyses in the DSEIS to inform this proposed rule. The comments we received are available online at <http://www.regulations.gov> in Docket No. FWS-R2-ES-2020-0007.

Information Requested

We are seeking comments from the public on the proposed revisions to the 2015 10(j) rule described in this document and our associated DSEIS. We want to ensure that any final rule

is as effective as possible. Therefore, we request comments or information from other concerned governmental agencies, Native American Tribes, the scientific community, industry, and any other interested parties concerning this proposed rule. Your comments should be as specific as possible.

We will post your entire comment—including your personal identifying information—on <http://www.regulations.gov>. If you provide personal identifying information in your comment, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. The comments we receive and any supporting documentation we used in preparing this proposal will be available for public inspection at <http://www.regulations.gov>. All comments, including commenters' names and addresses, if provided to us, will become part of the supporting record.

We will consider comments and information we receive during the public comment period on the proposed rule as we prepare our final rule and final SEIS. Accordingly, the final rule and final SEIS may differ from this proposal and the DSEIS. Please note that submissions merely stating support for, or opposition to, the actions under consideration, without providing supporting information, although noted, do not provide substantial information necessary to support a determination. Section 10(j)(2)(B) of the ESA (16 U.S.C. 1531 *et seq.*) and our regulations at 50 CFR 17.81 direct that our determinations and findings regarding designation of experimental populations be made utilizing the best scientific and commercial data available.

We are specifically seeking comments on the proposed revisions to the 2015 10(j) rule described in this document and the associated DSEIS, including:

- The effect of the proposed revised population objective on the recovery of the Mexican wolf, including the extent to which the proposed revision supports the MWEPA population in contributing to recovery;
- The effect of the proposed genetic objective on the recovery of the Mexican wolf, including the extent to which the proposed revision supports the MWEPA population in contributing to recovery;
- The effects of the proposed temporary restriction of three of the take provisions on the recovery of the Mexican wolf;
- The effects of the proposed revisions (population objective, genetic objective, and take provisions) on public, Tribal, and private lands with management activities such as ranching and livestock production, hunting, guiding, and other land uses; and
- Scientific information pertinent to our proposed determination to (re)designate the experimental population for the Mexican wolf in the MWEPA as nonessential.

Public Information Sessions and Public Hearings

We have scheduled three public information sessions and two public hearings on this proposed rule. We will hold the public information meetings and public hearings on the dates and at the times listed above under *Public information sessions and public hearings* in **DATES**. We are holding the public information sessions and the public hearings via the Zoom online video platform and via teleconference so that participants can attend remotely. Options for participation include: (1) Listen to and view one of the information sessions and one of the hearings via Zoom, or (2) listen to the information sessions and hearings by telephone. For security purposes and to ensure as many members of the public can participate as possible within the capacity of our Zoom and telephone lines, registration for the information sessions and

hearings is required. To listen and view the information sessions or hearings via Zoom, listen to the information sessions or hearings by telephone, or provide oral public comments at the public hearing by Zoom or telephone, you must register. We ask that individuals register for only one public information session and one public hearing. For information on how to register, visit <https://www.fws.gov/southwest/es/mexicanwolf/10j-revision>. If applicable, interested members of the public not familiar with the Zoom platform should view the Zoom video tutorials (<https://support.zoom.us/hc/en-us/articles/206618765-Zoom-video-tutorials>) prior to the public information sessions and public hearings.

The public hearings will provide interested parties an opportunity to present verbal testimony (formal, oral comments) regarding this proposed rule and the DSEIS. While the public information sessions will be an opportunity for dialogue with the USFWS, the public hearings are not: they are a forum for accepting formal verbal testimony. In the event there is a large attendance, the time allotted for oral statements may be limited. Therefore, anyone wishing to make an oral statement during the public hearings for the record is encouraged to provide a prepared written copy of their statement to us through the Federal eRulemaking Portal, or U.S. mail (see **ADDRESSES**, above); providing an oral comment is not required for submission of a written comment. There is no limit on the length of written comments submitted to us. Anyone wishing to make an oral statement at a public hearing must register before the hearing (<https://www.fws.gov/southwest/es/mexicanwolf/10j-revision>). The use of virtual public hearings is consistent with our regulations at 50 CFR 424.16(c)(3).

The USFWS is committed to providing access to the public information sessions and public hearing for all participants. Live audio via telephone or computer speakers and closed captioning via Zoom will be available during public information sessions and public hearings.

We will post a full audio and video recording and transcript of the public hearings online at <https://www.fws.gov/southwest/es/mexicanwolf/10j-revision> after the hearings. Persons with disabilities requiring reasonable accommodations to participate in a public information session and/or hearing should contact the person listed under **FOR FURTHER INFORMATION CONTACT** at least 5 business days prior to the date of the information session and/or hearing to help ensure availability. We will post an accessible version of the USFWS public information session presentation online at <https://www.fws.gov/southwest/es/mexicanwolf/10j-revision> prior to the date of the first public information session (see **DATES**, above).

Background

Statutory and Regulatory Framework

The 1982 amendments to the ESA (16 U.S.C. 1531 *et seq.*) included the addition of section 10(j), which allows for the designation of populations of listed species planned to be reintroduced as “experimental populations.” Under section 10(j) of the ESA and our regulations at 50 CFR 17.81, the USFWS may designate a population of endangered or threatened species that will be released into suitable habitat outside the species’ current range (but within its probable historical range, absent a finding by the Director of the USFWS in the extreme case that the primary habitat of the species has been unsuitably and irreversibly altered or destroyed) as an experimental population.

In accordance with 50 CFR 17.81(b), before authorizing the release as an experimental population (including eggs, propagules, or individuals) of an endangered or threatened species, and before authorizing any necessary transportation to conduct the release, the USFWS must find by regulation that such release will further the conservation of the species. In making such a finding, the USFWS uses the best scientific and commercial data available to consider:

(1) Any possible adverse effects on extant populations of a species as a result of removal of individuals, eggs, or propagules for introduction elsewhere (see *Possible Adverse Effects on Wild and Captive Breeding Populations*, below);

(2) The likelihood that any such experimental population will become established and survive in the foreseeable future (see *Likelihood of Population Establishment and Survival*, below);

(3) The relative effects that establishment of an experimental population will have on the recovery of the species (see **How Does the Experimental Population Contribute to the Conservation of the Species?**, below); and

(4) The extent to which the introduced population may be affected by existing or anticipated Federal, State, or Tribal actions or private activities within or adjacent to the experimental population area (see *Actions and Activities that May Affect the Introduced Population*, below).

Furthermore, under 50 CFR 17.81(c), all regulations designating experimental populations under section 10(j) shall provide:

(1) Appropriate means to identify the experimental population, including, but not limited to, its actual or proposed location, actual or anticipated migration, number of specimens released or to be released, and other criteria appropriate to identify the experimental population(s) (see *Location and Boundaries of the Proposed Experimental Population*, below);

(2) A finding, based solely on the best scientific and commercial data available, and the supporting factual basis, on whether the experimental population is, or is not, essential to the continued existence of the species in the wild (see *Is the Experimental Population Essential to the Continued Existence of the Species in the Wild?*, below);

(3) Management restrictions, protective measures, or other special management concerns of that population, which may include but are not limited to, measures to isolate and/or contain the experimental population designated in the regulation from natural populations (see *Management Restrictions, Protective Measures, and Other Special Management*, below); and

(4) A process for periodic review and evaluation of the success or failure of the release and the effect of the release on the conservation and recovery of the species (see *Review and Evaluation of the MWEPA Population*, below).

Under 50 CFR 17.81(d), the USFWS shall consult with appropriate State game and fish agencies, local governmental entities, Tribal governments, affected Federal agencies, and affected private landowners in developing and implementing experimental population rules. To the maximum extent practicable, section 10(j) rules represent an agreement between the USFWS, the affected State and Federal agencies, and persons holding any interest in land that may be affected by the establishment of an experimental population.

Under 50 CFR 17.81(f), the Secretary of the Interior (Secretary) may designate critical habitat as defined in section 3(5)(A) of the ESA for an essential experimental population. No designation of critical habitat will be made for nonessential experimental populations. In those situations where a portion or all of an essential experimental population overlaps with a natural population of the species during certain periods of the year, we will not designate critical habitat for the area of overlap unless implemented as a revision to critical habitat of the natural population for reasons unrelated to the overlap itself.

Under 50 CFR 17.82, any population determined by the Secretary to be an experimental population will be treated as if it were listed as a threatened species for purposes of establishing protective regulations with respect to that population. The protective regulations adopted for an

experimental population will contain applicable prohibitions, as appropriate, and exceptions for that population.

Under 50 CFR 17.83(a), any experimental population designated for a listed species (1) determined not to be essential to the survival of that species and (2) not occurring within the National Park System or the National Wildlife Refuge System will be treated for purposes of section 7 (other than paragraph (a)(1)) of the ESA as a species proposed to be listed under the ESA as a threatened species.

Under 50 CFR 17.83(b), any experimental population designated for a listed species that either (1) has been determined to be essential to the survival of that species or (2) occurs within the National Park System or the National Wildlife Refuge System as now or hereafter constituted will be treated for purposes of section 7 of the ESA as a threatened species. Any biological opinion prepared pursuant to section 7(b) of the ESA and any agency determination made pursuant to section 7(a) of the ESA will consider any experimental and nonexperimental populations to constitute a single listed species for the purposes of conducting the analyses under such sections.

Legal Status

On January 16, 2015, we published a final rule (80 FR 2488) listing the Mexican wolf as endangered. Previously, on January 12, 1998, we published a final rule (63 FR 1752) adopting regulations that designate a nonessential experimental population of the Mexican wolf in Arizona and New Mexico as the Mexican Wolf Experimental Population Area (MWEPA). The Mexican wolf is treated as endangered wherever it is found except where included in the MWEPA.

The Mexican wolf is also protected by State laws in the United States and by federal law in Mexico. In Arizona, the gray wolf, including the Mexican wolf subspecies, is identified as a

Species of Greatest Conservation Need (Arizona Game and Fish Department 2012). The gray wolf, including the Mexican wolf subspecies, is listed as endangered in New Mexico (Wildlife Conservation Act, 17-2-37 through 17-2-46 New Mexico Statutes (NMSA) 1978; List of Threatened and Endangered Species, 19.33.6 New Mexico Administrative Code (NMAC) 1978) and Texas (Texas Parks and Wildlife Code, chapter 68). In Mexico, the status of the Mexican wolf was updated from “probably extinct in the wild” to “endangered” in November 2019, via federal regulations (Norma Oficial Mexicana NOM-059-SEMARNAT-2010) (Secretaría de Medio Ambiente y Recursos Naturales [SEMARNAT; Federal Ministry of the Environment and Natural Resources] 2010).

Previous Federal Actions

On April 28, 1976, we published a final rule (41 FR 17736) listing the Mexican wolf as endangered under the ESA. On March 9, 1978, we published a final rule (43 FR 9607) reclassifying the entire gray wolf species in North America south of Canada as endangered, except in Minnesota where we listed it as threatened. The March 9, 1978, gray wolf listing rule subsumed the Mexican wolf subspecies listing but stated that we would continue to recognize the Mexican wolf as a valid biological subspecies for purposes of research and conservation.

On April 1, 2003, we published a final rule (68 FR 15804) revising the classification of gray wolves by establishing three gray wolf distinct population segments (DPSs), including the Mexican wolf in the Southwestern DPS. Subsequently, in 2008, two federal district courts overturned this rule, and the USFWS considered the gray wolf to have reverted to its listing status prior to the April 1, 2003, rule (see 73 FR 75356; December 11, 2008).

On January 16, 2015, we published a final rule (80 FR 2488) listing the Mexican wolf as endangered. This final rule created a separate entry for the Mexican wolf on the List of

Endangered and Threatened Wildlife so that the subspecies was no longer subsumed in the gray wolf listing. In effect, the Mexican wolf has been protected as endangered since 1976.

On January 12, 1998, we published a final rule (63 FR 1752) designating a nonessential experimental population of the Mexican wolf in portions of Arizona and New Mexico. We began releasing captive wolves into the wild in the MWEPA later that year. On January 16, 2015, we published a final rule (80 FR 2512; the “2015 10(j) rule”) revising the January 12, 1998, experimental population designation to improve the conservation and management of the Mexican wolf in the MWEPA.

Our designation of the MWEPA in 1998, and our 2015 revisions to that MWEPA designation, necessitated analysis of our proposed actions under NEPA. On December 20, 1996, we released the final environmental impact statement titled, “Reintroduction of the Mexican Wolf within its Historic Range in the Southwestern United States,” and on November 25, 2014, we released our subsequent “Environmental Impact Statement for the Proposed Revision to the Regulations for the Nonessential Experimental Population of the Mexican Wolf.”

On March 31, 2018, the District Court of Arizona remanded the 2015 10(j) rule to the USFWS (*Center for Biological Diversity v. Jewell*, No. 4:15-cv-00019-JGZ (D. Ariz.) (March 31, 2018) (“March 31, 2018, Order”). In response to the remand, we began the process to revise the 2015 10(j) rule and develop the DSEIS. On April 15, 2020, we published our notice of intent to prepare the DSEIS (85 FR 20967); that document opened the public scoping process under NEPA to seek public input on the issues under remand.

In addition to our rulemaking actions, the USFWS has developed two recovery plans for the Mexican wolf: the 1982 Mexican Wolf Recovery Plan (USFWS 1982), and the 2017 Mexican Wolf Recovery Plan, First Revision (USFWS 2017a) (revised recovery plan). The

revised recovery plan supersedes the original plan and provides a comprehensive strategy and long-term conservation and recovery goals for the USFWS Mexican wolf recovery program. Following completion of the revised recovery plan, we conducted a 5-year status review for the Mexican wolf under section 4(c)(2)(A) of the ESA in 2018 (see 83 FR 25034; May 31, 2018).

For more detailed information on previous Federal actions concerning the Mexican wolf through 2015, including petition findings and other 5-year reviews, refer to the final rule to list the Mexican wolf as endangered (80 FR 2488; January 16, 2015) and the 2015 10(j) rule (80 FR 2512; January 16, 2015). We note that on November 3, 2020, the USFWS published a final rule (85 FR 69778) removing the gray wolf from the List of Endangered and Threatened Wildlife (i.e., “delisting” the gray wolf). That rule provides additional information on previous Federal actions for the gray wolf. The subspecies listing for the Mexican wolf and the Mexican wolf experimental population designation are not affected by the USFWS November 3, 2020, final rule to delist the gray wolf. All previous actions for the Mexican wolf and gray wolf are also available on the Environmental Conservation Online System at <https://ecos.fws.gov/ecp>; type “gray wolf” and “Mexican wolf” into the Search Tool.

In addition to the information sources identified above, questions about previous Federal actions can be directed to the Mexican Wolf Recovery Program, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Recovery Efforts

The United States and Mexico have collaborated on Mexican wolf recovery since the mid-1970s. The early focus of the binational recovery effort was to save the Mexican wolf from extinction through the establishment of a captive breeding population (USFWS 1982, p. 28). The

captive population held 369 Mexican wolves in approximately 55 facilities in the United States and Mexico as of June 30, 2020 (Scott et al. 2020, p. 7). Although housed in numerous facilities, captive Mexican wolves are managed as a single population through the routine transfer of wolves among institutions for breeding events or other management needs. The captive population is maintained in accordance with stringent genetic and population objectives established by the Species Survival Program (SSP). Reintroduction of the Mexican wolf to the wild began in 1998 and 2011 for the United States and Mexico, respectively (see USFWS 2017a, pp. 5–8 for additional information on both reintroductions).

The USFWS revised recovery plan (see **Previous Federal Actions**, above) provides the binational long-term recovery strategy for the Mexican wolf, including recovery criteria and recovery actions (USFWS 2017a). The revised recovery plan strategy recommends establishing and maintaining a minimum of two resilient, genetically diverse Mexican wolf populations distributed across ecologically and geographically diverse areas in the subspecies' range in the United States and Mexico (USFWS 2017a, p. 10). Recovery criteria for downlisting and delisting the Mexican wolf address threats related to the extinction risk associated with small population size, loss of gene diversity and related genetic issues, and human-caused mortality (USFWS 2017a, pp. 18–25). Criteria will need to be met in both countries for threats across the range of the Mexican wolf to be lessened and alleviated sufficiently to consider delisting the Mexican wolf. The revised recovery plan provides for evaluations at 5 and 10 years after plan implementation to ensure progress toward recovery (USFWS 2017a, pp. 26–27). Site-specific actions to alleviate threats, as well as other actions necessary to manage Mexican wolves across their range, are provided (USFWS 2017a, pp. 28–34). A separate recovery implementation strategy provides detailed activities for the USFWS and our partners to contribute to the recovery

actions (online at <https://www.fws.gov/southwest/es/mexicanwolf/>). We intend for the MWEPA population to serve as the population to meet recovery criteria in the United States, and Mexico is pursuing recovery in the Sierra Madre Occidental in northern Mexico. (See *Current Range in the United States and Mexico*, below, for additional information.)

The revised recovery plan provides an important foundation for our proposed revisions to the 2015 10(j) rule. While we intended for the 2015 10(j) rule to improve the efficacy of reintroduction and contribute to the conservation of the Mexican wolf, we were simultaneously aware that at that time (2015) we did not have a full vision of recovery with which to align the revised experimental population designation. The USFWS recognized this shortcoming in the 2015 10(j) rule (80 FR 2512, January 16, 2015, pp. 2514–2515). We are proposing revisions to the 2015 10(j) rule that address the March 31, 2018, Order by aligning the MWEPA designation with the long-term conservation and recovery strategy and criteria in the revised recovery plan.

In addition to publishing the 2015 10(j) rule and finalizing the revised recovery plan in 2017, we have taken a number of steps to advance the recovery of the Mexican wolf:

First, we have strengthened our collaborative management framework with Federal, State, county, and Tribal partners. We initiated a new Memorandum of Understanding for Mexican Wolf Recovery and Management (June 24, 2019) (USFWS 2019; 2019 MOU). Signatories to the 2019 MOU as of August 12, 2021, include: White Mountain Apache Tribe; Arizona Game and Fish Department; New Mexico Department of Game and Fish; U.S. Department of Agriculture Wildlife Services and U.S. Department of Agriculture Forest Service; Bureau of Land Management-Arizona and Bureau of Land Management-New Mexico; National Park Service; Catron County, New Mexico; and Graham, Greenlee, Gila, and Navajo Counties in Arizona, as well as the Eastern Arizona Counties Organization. The 2019 MOU establishes a

framework for a long-term, scientific approach to reintroducing and managing Mexican wolves in Arizona and New Mexico to contribute to the recovery of the Mexican wolf pursuant to the revised recovery plan. The 2019 MOU includes signature by agencies and counties that were not signatories of the previous version at the time of the 2015 10(j) rule, representing a broadened base of expertise and logistical support to manage Mexican wolves in the MWEPA and engage with local communities and the public.

The USFWS and our domestic partners have also strengthened our binational recovery collaboration with Mexico. Since the completion of the revised recovery plan in 2017, the USFWS and our partners have increased the extent of our technical support and communication at staff, management, and leadership levels. We have collectively engaged in coordination with the captive breeding facilities to ensure wolves are available for release in both countries in support of achieving recovery criteria. The USFWS and our partners have also provided wild wolves from the MWEPA to Mexico for release (see *Possible Adverse Effects on Wild and Captive Breeding Populations*, below, for additional information on releases in Mexico). In April 2019, the USFWS, Arizona Game and Fish Department, New Mexico Department of Game and Fish, the federal government of Mexico (Dirección General de Vida Silvestre and the Dirección de Especies Prioritarias para la Conservación), and other partners requested endorsement by the Executive Table of the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management for strengthened collaboration to implement recovery actions on both sides of the border. In 2019, the Arizona Game and Fish Department was awarded \$75,000 through the USFWS Recovery Challenge grant program to assist Mexico's Mexican wolf reintroduction. The Arizona Game and Fish Department is also awarded funds of approximately

\$250,000 annually for Mexican wolf recovery implementation through the USFWS Cooperative Endangered Species Conservation Fund Traditional Section 6 grant program.

The USFWS and our partners continue to intensively manage and monitor the status of Mexican wolves in the MWEPA and now specifically track progress toward achieving the recovery criteria in the revised recovery plan for the United States. Numerous field staff from multiple agencies, including law enforcement, conduct daily management activities throughout the MWEPA. These activities include: monitoring and data collection of wolf locations and activity; conducting or assisting with proactive or responsive management measures to address wolf-livestock or wolf-human conflicts; releasing wolves; providing vaccinations or other medical care; coordinating Mexican wolf transfers between SSP facilities or with Mexico; investigating wolf mortalities; and education and outreach in local communities and with the media. We summarize these activities in quarterly and annual reports and in our annual initial release and translocation plans available on our website at <https://www.fws.gov/southwest/es/mexicanwolf/>. We use the data and information we collect to adapt our management to ensure continued progress toward recovery.

The USFWS and our partners have also tested the technique of cross-fostering (placing captive-born pups into wild dens to be raised with the wild litter) as a release method to increase gene diversity in the MWEPA since 2014. Between 2014 and 2021, we have cross-fostered 78 pups, including placing 72 pups from captive dens into wild dens, and 6 pups from one wild den to another wild den. We have increased the number of pups we cross-foster, from 2 pups in 2014 to 22 pups in 2021 based on our success with the management technique, the number of captive litters that align with the birth of wild litters, and the staffing capacity of our program and partner agencies (USFWS files).

The USFWS and our partners have also increased efforts to address wolf-livestock conflict, which is one of the primary sources of concern in local communities. The USFWS, our partners, and livestock owners and operators implement a number of proactive management techniques to reduce wolf-livestock conflict, including increasing the number and geographic coverage of range riders, using fladry (strips of fabric mounted along fencelines to deter wolves) in calving areas, harassing or hazing Mexican wolves using scare devices and noise, manipulating Mexican wolf pack movements using food caches, moving cattle away from dens, and other activities (USFWS 2018, pp. 25–27). The USFWS provides depredation compensation and funding for proactive management to eligible States and Tribes through its Wolf Livestock Demonstration Project grants. The Arizona Livestock Loss Board provides depredation compensation for Arizona operators. Several nongovernmental organizations also contribute substantial financial and logistical resources to address and reduce livestock conflict. (See our annual reports for information on funding related to livestock depredations and proactive management, as well as additional information about the Mexican Wolf/Livestock Council, online at: <https://www.fws.gov/southwest/es/mexicanwolf/>.)

Our efforts across the recovery program are showing success in the MWEPA. The minimum population count in 2020 of 186 wolves, including 20 breeding pairs (defined as a pair that produced pups, at least one of which survived to the end of the year), continues a trend of steady population growth, nearly doubling in size over the last 5 years (see our online population estimate at <https://www.fws.gov/southwest/es/mexicanwolf/>). This growth lessens the severity of demographic threats to the population, as described in **Summary and Rationale for Proposed Changes to the Experimental Population Designation in Relation to Recovery**, below. Mexican wolves have expanded their range significantly under the 2015 10(j) rule, from a range

of 7,255 square miles (mi²) (18,790 square kilometers (km²)) in 2014, the year prior to our expansion of the MWEPA, to 19,495 mi² (50,492 km²) in 2020 (USFWS files). This demonstrates progress in our recovery strategy to expand the geographic distribution of the Mexican wolf (USFWS 2017a, pp. 11, 24). We also recorded a minor increase in gene diversity and decrease in population mean kinship (a measure of the relatedness of an individual to the population) from 2020 to 2021 (USFWS files). These measures of the genetic status of the MWEPA population document the positive impact that recent cross-fostering events are having, and we expect to document continued progress as we continue our efforts to decrease genetic threats to the Mexican wolf, as described in **Summary and Rationale for Proposed Changes to the Experimental Population Designation in Relation to Recovery**, below.

Biological Information

Species Description

The Mexican wolf (*Canis lupus baileyi*) is a subspecies of gray wolf that historically occurred in portions of the southwestern United States and central and northern Mexico. Mexican wolves are the smallest extant gray wolf in North America, weighing between 50 to 90 pounds. They are typically a patchy black, brown to cinnamon, and cream color, with primarily light underparts (80 FR 2488, January 16, 2015, p. 2490).

Mexican wolves are social predators that live in packs ranging in size from two wolves to more than a dozen wolves. Mexican wolf packs establish a territory, or area, within which pack members hunt and find shelter. Mexican wolves predominantly prey on elk, but other sources of prey include deer, small mammals, and birds. Mexican wolves are also known to prey and scavenge on livestock (USFWS 2017b, pp. 12–19).

Historical Range

The historical range of the Mexican wolf has been the subject of scientific inquiry and debate for several decades, primarily related to the northern and possibly western extent of the range. The USFWS recognizes concordance in the scientific literature depicting the Sierra Madre of Mexico and southern Arizona and New Mexico as Mexican wolf core historical range, and continues to recognize the expanded historical range per Parsons (1996, p. 106) that extends into central New Mexico and Arizona (see our summary in USFWS 2017b, pp. 10–12, and in our final rule to list the Mexican wolf as an endangered subspecies (80 FR 2488, January 16, 2015)). We continue to monitor the scientific literature for ongoing exploration of this topic.

Current Range in the United States and Mexico

The current range of the Mexican wolf in the wild includes only those areas where they have been reintroduced from captivity and the surrounding areas to which they have naturally expanded: the MWEPA in the United States and a portion of the Sierra Madre Occidental mountain range in northern Mexico. Mexican wolves inhabit approximately 19,495 mi² (50,492 km²) of the MWEPA as of the end of 2020 (USFWS files). The MWEPA is 153,871 mi² (398,524 km²), with approximately 32,244 mi² (83,512 km²) of suitable habitat that occurs on various land ownership types, but primarily U.S. Forest Service (USFS) land (USFWS 2014, chapter 3, p. 11). The MWEPA is within the probable historical range of the Mexican wolf (see *Historical Range*, above).

Mexican wolves in the northern Sierra Madre Occidental in the states of Sonora and Chihuahua in Mexico are approximately 130 miles (mi) (209 kilometers (km)) south of the U.S.-Mexico border. The Sierra Madre Occidental is the longest mountain range in Mexico, extending from northern Mexico south to the State of Jalisco. In the northern portion of the mountain range,

there are approximately 7,305 mi² (18,922 km²) of suitable Mexican wolf habitat, with limited habitat connectivity to a second area to the south containing approximately 9,728 mi² (25,196 km²) of suitable habitat. Suitable Mexican wolf habitat in the Sierra Madre Oriental, a mountain range to the east, has also been identified (Martínez-Meyer et al. 2020, entire), but releases have not taken place in this area as of February 2021. The MWEPA designation stops at the U.S.-Mexico border; the wolves in Mexico are not part of the experimental population.

Habitat Use and Movement Ecology in the MWEPA

Wolves are considered habitat generalists that can occupy areas where prey populations and human tolerance support their existence (Fritts et al. 2003, pp. 300–301). Accordingly, we consider suitable habitat for Mexican wolves to be forested areas with adequate wild ungulate prey and low levels of human development and livestock density. In the MWEPA, Mexican wolves inhabit evergreen pine-oak woodlands (i.e., Madrean woodlands), pinyon-juniper woodlands (i.e., Great Basin conifer forests), and mixed-conifer montane forests (i.e., Rocky Mountain, or petran forests) that are inhabited by elk, mule deer, and white-tailed deer (USFWS 2017b, p. 14). Mexican wolves in the MWEPA move within their territories daily to hunt and find shelter. Pack home range size can vary significantly. For example, in 2018, we documented a home range of approximately 57 mi² (148 km²) for the Dark Canyon pack and 552 mi² (1,352 km²) for the Tsay O Ah pack, with an average home range size of approximately 210 mi² (544 km²) across 24 packs or pairs (USFWS 2018, p. 22; also see USFWS 2017b, p. 13). Individual juvenile Mexican wolves sometimes disperse beyond their pack's territory to find a mate and establish a new territory. We track Mexican wolves' movements via radio telemetry and global positioning system radio collars to document pack home ranges, occupied range, and dispersal events.

Lifecycle

Mexican wolf life history is similar to that of other gray wolves (see USFWS 2010, pp. 32–41). In the wild, Mexican wolves live on average 4 to 5 years, although we have documented wolves living to 14 years (USFWS files). Mexican wolves reach sexual maturity around 2 years of age and have one reproductive cycle per year. Typically only one female and one male (the main breeding pair) breed in a pack and produce pups; however, there have been instances in the wild of a secondary female being bred and having pups within the same pack. Mexican wolves in the wild are generally born between early April and early May, with an average litter size of 4.65 pups (USFWS files).

For a detailed description of the Mexican wolf, see our discussion under *Subspecies Information* in our final rule to list the Mexican wolf as endangered (80 FR 2488, January 16, 2015, pp. 2489–2492) or the biological report for the Mexican Wolf (USFWS 2017b).

Threats/Causes of Decline

The Mexican wolf is listed as endangered due to the individual and cumulative effects of excessive human-caused mortality, including illegal killing; genetic issues including inbreeding, loss of heterozygosity, and loss of adaptive potential; and demographic stochasticity (decreases in survival or reproduction) associated with small population size (80 FR 2488, January 16, 2015; see also USFWS 2017a, p. 9, and USFWS 2017b, pp. 23–34, for additional discussion of these threats). We have established a comprehensive strategy and suite of actions in our revised recovery plan to diminish these threats sufficiently such that the Mexican wolf can be considered for delisting when rangewide recovery criteria are met. Under the guidance of the recovery plan, the 2015 10(j) rule, and other program documents, the USFWS and our partners manage the MWEPA to lessen and alleviate threats to the experimental population. Our proposed revisions

to the 2015 10(j) rule will also lessen and alleviate threats to the Mexican wolf, as explained in the following discussion.

Summary and Rationale for Proposed Changes to the Experimental Population

Designation in Relation to Recovery

We are proposing revisions to the MWEPA designation to ensure that it contributes to the long-term conservation and recovery of the Mexican wolf. We are using the revised recovery plan as the foundation of our proposed revisions because it provides our strategy and criteria for Mexican wolf recovery. We are proposing to modify the population objective, establish a genetic objective, and temporarily restrict three take provisions from the 2015 10(j) rule as follows, and for the following reasons:

Modification of the Population Objective

We propose to revise the population objective for the MWEPA at 50 CFR 17.84(k)(9)(iii) by deleting the following three sentences: Based on end-of-year counts, we will manage for a population objective of 300 to 325 Mexican wolves in the MWEPA in Arizona and New Mexico. So as not to exceed this population objective, we will exercise all management options with preference for translocation to other Mexican wolf populations to further the conservation of the subspecies. The USFWS may change this provision as necessary to accommodate a new recovery plan.

We propose to replace the deleted language with the following two sentences: Based on end-of-year counts, we will manage to achieve and sustain a population average greater than or equal to 320 wolves in Arizona and New Mexico. In order to achieve the current demographic recovery criteria for the United States, this average must be achieved over an 8-year period, the

population must exceed 320 Mexican wolves each of the last 3 years of the 8-year period, and the annual population growth rate averaged over the 8-year period must be stable or increasing.

Under this proposed population objective, we would continue to manage Mexican wolves in the MWEPA to maintain a population average greater than or equal to 320 wolves until delisting occurs. After delisting, the States of Arizona and New Mexico and the Tribes in Arizona and New Mexico would obtain management authority and responsibility to maintain the Mexican wolf at or above recovered levels.

When we established the population objective in the 2015 10(j) rule, we explained that the USFWS may change this provision as necessary to accommodate a new recovery plan (80 FR 2512, January 16, 2015, p. 2563; 50 CFR 17.84(k)(9)(iii)). Now, our proposed revised population objective for the MWEPA is based on the recovery criteria in the revised recovery plan, which was developed subsequent to the 2015 10(j) rule. During the development of the revised recovery plan, we gathered data on the Mexican wolf population in the MWEPA for the purpose of conducting population viability analysis modeling. Several previous population and habitat viability analysis models served as springboards for our effort (Carroll et al. 2006; Carroll et al. 2014). We updated or replaced data sets used in previous studies to ensure model parameterization reflected our current knowledge of Mexican wolves in the MWEPA (as opposed to gray wolf populations in other geographic areas, as used in previous studies). For example, we updated datasets on mortality rates, the frequency and effects of disease, female pairing, and the effect of inbreeding on the likelihood of producing pups, all of which are important factors in projecting future population abundance and persistence. We incorporated more than 15 years of wild Mexican wolf data in the modeling effort and made conservative

choices in parameterization to ensure model results would not overestimate the growth or probability of persistence of simulated populations (Miller 2017, entire).

During the recovery planning process, we used the population viability analysis model to explore management scenarios that would achieve at least a 90 percent likelihood of persistence of the MWEPA population over a 100-year period to alleviate the threat of demographic stochasticity (USFWS 2017a, pp. 20–22). The threat of demographic stochasticity due to small population size means that at smaller population sizes, a population is more susceptible to uncertain demographic events such as changes in birth or death rates that could lead toward extirpation of the population. As a population grows, this threat diminishes and the likelihood of population persistence increases (see our discussion at USFWS 2017a, pp. 13, 20–22; USFWS 2017b, pp. 35–36; Miller 2017, entire; USFWS 2019, pp. 63–68). The combined elements of the demographic recovery criteria for the United States that our proposed population objective is based upon—that the population must maintain an average greater than or equal to 320 wolves over an 8-year period, that the population must exceed 320 wolves in each of the last 3 years of the 8-year period, and that the annual growth rate averaged over the 8-year period must be stable or increasing—provides for a 90 percent likelihood of persistence of the MWEPA population over a 100-year period (USFWS 2017a, p. 19).

The data and analyses we used as the basis of the demographic recovery criteria in the revised recovery plan were not available when we established the population objective in the 2015 10(j) rule (see discussion of available scientific studies at 80 FR 2512, January 16, 2015, p. 2517). We established the upper limit of the population objective in the 2015 10(j) rule because we did not have an up-to-date recovery plan to provide context for the contribution of the MWEPA to recovery; in other words, we did not know how many wolves may be needed for

recovery or how those wolves should be distributed geographically between different populations. The revised recovery plan now provides clear direction for the MWEPA population's contribution to recovery, and we recognize that an upper limit of 325 in the MWEPA is not consistent with being able to adequately alleviate the threat of demographic stochasticity to the Mexican wolf. Although "300 to 325" and "an average of 320" sound very similar, a range of 300 to 325 with an upper limit of 325 does not ensure at least a 90 percent likelihood of persistence over 100 years, because the upper limit combined with the absence of additional specifications of the population's behavior (exceeding 320 wolves in each of the last 3 years of the 8-year period, and that the annual growth rate averaged over the 8-year period must be stable or increasing) result in a population with an extinction risk of more than 10 percent over 100 years.

As we continue to manage for an average population size greater than or equal to 320 Mexican wolves in the MWEPA after the proposed population objective is reached, we would expect the population to fluctuate between the mid-300s to low 400s. Although a larger (more than low 400s) population size may be possible due to natural population growth, we would expect that population growth would slow down or stabilize in the mid-300s to low 400s in response to our future management actions such as reduced food caching, translocation of wolves to Mexico in support of their recovery goals, or removals for various management purposes.

We continue to collect and analyze data on the experimental population and to survey the scientific literature for additional information pertinent to managing the MWEPA population in a manner consistent with recovering the Mexican wolf. Since the completion of the revised recovery plan, we have not observed life-history events or population trends in Mexican wolves

in the MWEPA (such as changes in reproductive or mortality rates, for example) that cause us to reconsider the validity of the data used or the results of the population viability analysis that provided the foundation for our development of recovery criteria in the revised recovery plan. One published study critiqued the recovery criteria in the revised recovery plan, including the population viability analysis modeling used to develop the criteria (Carroll et al. 2019). The study explored how the modeling for the revised recovery plan differed from previous modeling and criteria-setting efforts for the Mexican wolf. The study identified six parameterization differences that varied across modeling efforts, grouping those parameters as biological (for example, the effects of disease), management-related (for example, the number of releases from captivity), or both biological and management-related (for example, the proportion of packs receiving supplemental feeding). The study examined how normative (values-based) and scientific decisions related to setting the values for and function of these parameters in a population viability analysis model affect model results, including the degree to which uncertainty surrounding specific parameters can influence scenario projections. The study recommended establishing a recovery strategy and recovery criteria that buffer against uncertainty and claimed that our approach did not do so. For example, the paper recommended inclusion of an independent human-caused mortality criterion to buffer against uncertainty in the parameterization of wolf mortality rates, in addition to a demographic recovery criterion based on extinction risk, as opposed to our approach of tying our human-caused mortality criterion to our demographic criterion (USFWS 2017a, p. 20). The study also critiqued the level of risk tolerance considered acceptable by the USFWS for the recovery of the Mexican wolf as too high, and ultimately claimed that political influence led to increased risk tolerance in establishing recovery criteria.

We acknowledge the authors' characterization that some decisions in population viability analysis modeling and the establishment of recovery criteria contain a normative element, such as what level of extinction risk is acceptable for recovery or the degree to which supplemental feeding is an appropriate management intervention during species recovery. We also acknowledge that recovery criteria could be formulated differently than those contained in the revised recovery plan to articulate when threats have been alleviated sufficiently to delist the Mexican wolf. However, these acknowledgements do not alter our position that the population viability analysis modeling conducted for the revised recovery plan constitutes the best available information upon which to base a revised population objective for the Mexican wolf in the MWEPA, because it is based on up-to-date Mexican wolf data and reflects realistic management scenarios (such as incorporating supplemental feeding). Our proposed population objective would remove the upper limit of 325 wolves; lead to a more robust population of wolves in the MWEPA; allow for annual population fluctuations while ensuring stable population performance; and alleviate the threat of demographic stochasticity consistent with the recovery needs of the Mexican wolf.

Establishment of a Genetic Objective

We propose to establish a genetic objective for the MWEPA to address genetic threats to the experimental population. We did not include a genetic objective in the 2015 10(j) rule; rather, we provided a recommendation in the preamble of the rule for the release of Mexican wolves from captivity at a level that would achieve a minimum of 1 to 2 effective migrants per generation entering the population, depending on its size, over the long term. The rule went on to say that in the more immediate future, we may conduct additional releases in excess of 1 to 2 effective migrants per generation to address the high degree of relatedness of wolves in the

current Blue Range Wolf Recovery Area (80 FR 2512, January 16, 2015, p. 2517). We are now proposing to modify our approach in the 2015 10(j) rule in two ways:

First, we propose to revise the language to state that the USFWS and designated agencies will conduct a sufficient number of releases into the MWEPA from captivity to result in at least 22 released Mexican wolves surviving to breeding age. Second, we propose to codify this release statement at 50 CFR 17.84(k)(9)(v). We expect to achieve this proposed objective by 2030, as described below in *Modification of Three Allowable Forms of Take of Mexican Wolves*.

Similar to the discussion above of the population objective, our proposed establishment of a genetic objective is based on information and analyses conducted subsequent to the 2015 10(j) rule that are included in the revised recovery plan. When we developed our genetic criterion in the revised recovery plan, we determined that wild populations contributing to recovery should represent approximately 90 percent of the genet diversity available in the captive population to consider genetic threats sufficiently abated (USFWS 2017a, p. 13). The reason for this is that the gene diversity in the captive population is higher than either wild population in the United States or Mexico; therefore, releasing captive wolves will add beneficial gene diversity to the experimental population as some of the released wolves breed and produce offspring in the MWEPA. Increasing gene diversity in the MWEPA to approximately 90 percent of the gene diversity available in the captive population will reduce the incidence of inbreeding depression, and over a longer timeframe, it will aid Mexican wolves' ability to respond and adapt to various and changing environmental conditions (USFWS 2017a, p. 22). In addition, releasing captive wolves makes room in captive facilities for additional captive breeding events, which enables the captive population to maintain, or slow the loss of, genetic diversity in captivity and

continue supporting the wild populations in the United States and Mexico during the recovery process (Scott et al. 2020, p. 9).

As we explored model scenarios during the recovery planning process to alleviate genetic threats to the Mexican wolf by releasing captive wolves to the wild, we recognized that not all wolves released from captivity would survive to breeding age, and due to wolves' social structure, not all wolves that survive to breeding age would breed (Miller 2017, pp. 9–10). Based on survival and mortality data of different age classes of Mexican wolves (pups, subadults, adults), we determined that at least 22 released Mexican wolves surviving to breeding age by 2035 would result in a sufficient portion of those wolves breeding to result in approximately 90 percent of the genetic diversity of the captive population being represented in the wild (USFWS 2017 a, pp. 22–24). Our proposal to revise the release recommendation in the 2015 10(j) rule by establishing a genetic objective would contribute to the recovery of the Mexican wolf because our proposal aligns with the genetic recovery criterion in the revised recovery plan and would therefore alleviate genetic threats consistent with the recovery needs of the Mexican wolf (see **Recovery Efforts**, above, and USFWS 2017a, pp. 5, 7, 9, 13–14, 22–23; USFWS 2017b, pp. 26–29).

Our proposed revision would result in a larger number of released wolves entering the MWEPA in a shorter time period than the release recommendation in the 2015 10(j) rule, which reflects our improved understanding of the number and timing of releases needed to adequately reduce genetic threats. Under our 2015 10(j) rule, we intended to release 35 to 50 captive wolves by 2035 (see USFWS 2014, Appendix D, pp. 3, 12); however, in our revised recovery plan, we estimated we would need to release at least 70 wolves to achieve our genetic criterion in the revised recovery plan. Because we are conducting releases via cross-fostering, a method for

which we are uncertain of the number of releases needed to achieve at least 22 released wolves surviving to breeding age, we have aggressively pursued releases in the last few years. We expect that the survival of cross-fostered pups in their first years is similar to wild-born pups (approximately 50 percent). As of the spring of 2021, we have released 72 Mexican wolves from captivity to the wild via cross-fostering, and we have documented a minimum of 7 out of 30 released pups surviving to breeding age. Pups released in 2020 (20 pups) and 2021 (22 pups) had not yet reached breeding age in the spring of 2021, and are therefore not eligible to be included in the total number of released pups that could have survived to breeding age in 2021 (30 pups). We will continue to document our progress annually toward at least 22 released wolves surviving to breeding age and will adjust our ongoing release plans accordingly.

We note that our proposed genetic objective shifts our previous language in the 2015 10(j) rule from tracking “effective migrants,” which means an animal that comes from outside the population and successfully reproduces within the population, to instead tracking captive animals released to the MWEPA that “survive to breeding age” and have the opportunity to contribute genetically to the population. This proposed revision in language tracks our population viability analysis modeling approach in the revised recovery plan directly, and it appropriately addresses the need to increase gene diversity in the MWEPA population because it results in the representation of approximately 90 percent of the gene diversity available in the captive population entering the MWEPA (USFWS 2017a, pp. 22–24).

As stated earlier, we propose to codify this release statement at 50 CFR 17.84(k)(9)(v) and refer to it as a genetic objective. Establishment of a genetic objective strengthens this feature of our management because the genetic objective becomes part of the MWEPA regulations. In addition, we propose annual benchmarks for achieving the number of released wolves that

survive to breeding age by 2030 in *Modification of Three Allowable Forms of Take of Mexican Wolves*, below, which will drive expedient progress toward recovery and ensure that progress toward releasing captive wolves keeps pace with expected population growth.

Modification of Three Allowable Forms of Take of Mexican Wolves

We propose to modify three allowable forms of take of Mexican wolves at 50 CFR 17.84(k)(7) by temporarily restricting their use while we make progress toward increasing Mexican wolf gene diversity in the MWEPA. The three forms of allowable take from the 2015 10(j) rule we propose to modify are: take on non-Federal land in conjunction with a removal action (§17.84(k)(7)(iv)(C)), take on Federal land (§17.84(k)(7)(v)(A)), and take in response to an unacceptable impact to a wild ungulate herd (§17.84(k)(7)(vi)). We are proposing to temporarily restrict these forms of take because they can result in the loss of released Mexican wolves whose gene diversity could have contributed to alleviating genetic threats had they survived and reproduced during the timeframe of the genetic recovery criterion in the United States (see *Establishment of a Genetic Objective*, above). Temporarily restricting these potential sources of take will support the success of these wolves during a critical period in the recovery effort (that is, as we focus our management on alleviating threats and achieving recovery criteria). Therefore, we propose to add the following language to §17.84(k)(7)(iv)(C) and §17.84(k)(7)(v)(A):

(I) Until the USFWS has achieved the genetic objective for the MWEPA set forth at paragraph (k)(9)(v) of this section by documenting that at least 22 released wolves have survived to breeding age in the MWEPA, the USFWS or a designated agency may issue permits only on a conditional, annual basis according to the following provisions: Either

(i) Annual release benchmarks (here, the term “benchmark” means the minimum cumulative number of released wolves surviving to breeding age since January 1, 2016, as documented annually in March) have been achieved based on the following schedule:

Year	Benchmark
2021	7
2022	9
2023	11
2024	13
2025	14
2026	15
2027	16
2028	18
2029	20
2030	22

; or

(ii) Permitted take on non-Federal land [under §17.84(k)(7)(iv)], or on Federal land [under §17.84(k)(7)(v)], during the previous year (April 1 to March 31) did not include the lethal take of any released wolf or wolves that were or would have counted toward the genetic objective set forth at paragraph (k)(9)(v) of this section.

(2) After the USFWS has achieved the genetic objective set forth at paragraph (k)(9)(v) of this section, the conditional annual basis for issuing permits will no longer be in effect.

In addition, we propose to add the following language to §17.84(k)(7)(vi):

(E) No requests for take in response to unacceptable impacts to a wild ungulate herd may be made by the State game and fish agency or accepted by the USFWS until the genetic objective at paragraph (k)(9)(v) of this section has been met.

Once we reach the proposed genetic objective at §17.84(k)(9)(v), gene diversity of released wolves will have integrated into the population through breeding events between released and wild wolves such that released wolves will no longer represent a pool of unique gene diversity; in other words, as more released wolves survive and breed in the wild, the

contribution of released wolves to the overall gene diversity of the MWEPA diminishes. Therefore, our approach to the temporary restriction of these take provisions is to ensure we are protective of released wolves during the time we are achieving the proposed genetic objective. Once we have reached the proposed genetic objective, we would remove these temporary restrictions in recognition that take (including removal) of released wolves would not have the potential to hinder the recovery of the Mexican wolf. In the near term, restricting these take provisions contingent upon achieving the proposed genetic objective would provide synergistic support toward the recovery of the Mexican wolf. The benchmarks we are proposing reflect the targets established in the revised recovery plan for 9 released wolves to be surviving to breeding age in 2022 and 16 released wolves to be surviving to breeding age in 2027 (USFWS 2017a, pp. 26-27), and would result in 22 released wolves surviving to breeding age 5 years prior to the scenarios we explored in the population viability analysis modeling for the revised recovery plan. This schedule will ensure that strong progress to alleviate genetic threats is occurring.

Simultaneous with our intention to increase and protect the gene diversity of the MWEPA population and alleviate genetic threats to the Mexican wolf, we continue to recognize that these three allowable forms of take can provide the USFWS, State fish and game agencies, domestic animal owners and their agents, and livestock owners and their agents with a management tool for resolving wolf conflict situations. We expect that over time, and especially as the experimental population grows numerically, multiple conflict situations may occur simultaneously in different locations within the MWEPA. The USFWS considers the issuance of take permits on Federal and non-Federal land to serve as a management tool because the permits may provide for conflicts to be resolved without the participation of the USFWS or a designated agency's personnel, allowing for limited agency resources to be used in the most efficient

manner. We have, therefore, integrated flexibility into the temporary restrictions we are proposing for permitted take on Federal and non-Federal land by recognizing that if an annual release benchmark toward the genetic objective is not achieved, and permitted take in the previous year did not result in the take of any released wolf or wolves, the permits are not the reason for missing the benchmark, nor are they negatively impacting gene diversity. (For example, the USFWS could miss the benchmark because we had not conducted adequate releases during a prior year due to logistical constraints.) In this context, we do not want to unnecessarily restrict a management tool that can be used to address conflicts if its use is not exacerbating a threat or hindering our progress toward recovery.

Our proposed revision to the provision for take in response to an unacceptable impact to a wild ungulate herd (§17.84(k)(7)(vi)) does not include a conditional approach such as we have incorporated into our proposed revisions for take on Federal and non-Federal land due to our uncertainty surrounding the extent of take that could occur under this provision. We are uncertain as to the number or frequency of future authorizations the USFWS may issue to a State or designated agency to remove wolves due to an unacceptable impact to a wild ungulate herd because we do not know when (e.g., at what number of wolves or wolf density) wolf predation on a localized herd could result in an ungulate decline that is deemed unacceptable based on State management goals. Further, the level of removal (i.e., number of wolves, timing, and duration) that could be requested by the State agency would depend on the level of ungulate decline occurring within the context of the State's management goals for that herd, as well as other pertinent factors, but would more likely result in authorized removal of one or more packs of wolves rather than an individual wolf. Removal of an entire pack or packs could result in removing multiple released Mexican wolves at once that could count toward our genetic

objective. Therefore, we recognize that the likelihood of take of a released wolf or wolves may be higher under this take provision than the other two take provisions we are proposing to revise. On the other hand, take under this provision could result in the translocation of Mexican wolves rather than permanent removal or lethal take, and, in those cases, no loss of gene diversity in the MWEPA would occur. Due to these uncertainties, our proposed revision to this take provision does not include any contingencies to use this provision during the temporary restriction period (that is, from now until the proposed genetic objective at §17.84 (k)(9)(v) is met).

Our final consideration as we evaluate our proposed restriction of these three take provisions is our recognition that this rule needs to serve the conservation and recovery of the Mexican wolf prior to, but also potentially after, the recovery criteria for the United States in the revised recovery plan have been met. Recovery of the Mexican wolf as envisioned by the revised recovery plan is contingent upon achieving recovery criteria for the population in the United States and the population in Mexico in order to adequately alleviate threats rangewide. Therefore, ongoing management of Mexican wolves in the United States under the ESA may occur after the MWEPA achieves the criteria for the United States if Mexico has not yet achieved its set of recovery criteria. These three take provisions will contribute to efficient, flexible management of a recovered population in the MWEPA until delisting occurs. We expect to remove the proposed temporary restrictions on these three take provisions after the genetic objective has been met. At that time, gene diversity will have been sufficiently improved to alleviate genetic threats, and the USFWS and our partners will be managing to achieve or maintain the demographic criteria. (We do not expect the MWEPA population to reach the demographic and genetic criteria simultaneously.) After the genetic objective has been met, we would expect to use these allowable forms of take in a manner consistent with achieving all

recovery criteria in the United States and maintaining the experimental population at recovered levels until rangewide delisting is appropriate.

Proposed Experimental Population

Location and Boundaries of the Proposed Experimental Population

The Mexican wolf experimental population is located in the MWEPA, as designated in the 2015 10(j) rule (80 FR 2512, January 16, 2015, p. 2558). The boundaries of the MWEPA are the portions of Arizona and New Mexico that are south of Interstate Highway 40 (I-40) to the international border with Mexico (see map at 50 CFR 17.84(k)(4)). The boundaries of the MWEPA are consistent with the recovery strategy established in the revised recovery plan, which states that we will continue to focus on one large Mexican wolf population south of I-40 in Arizona and New Mexico in the United States (USFWS 2017a, p. 11).

We consider the experimental population in the MWEPA to be wholly separate geographically from any nonexperimental populations of the same (sub)species. Based on the USFWS definition of a gray wolf population (see 59 FR 60252, November 22, 1994), which we have used for the Mexican wolf, there is a population of Mexican wolves in the northern Sierra Madre Occidental, Mexico, approximately 130 miles (209 km) south of the U.S.-Mexico international border. At the end of 2020, Mexico reported 30 to 35 Mexican wolves in the wild, including two breeding pairs that each successfully raised at least two young annually for 2 consecutive years (Carlos Lopez 2020, pers. comm.). While we acknowledge that the populations are geographically located within dispersal range of one another, interconnectivity between the MWEPA and the Mexico population is currently low, and future connectivity is expected to be similarly low as explained below. For the MWEPA to not be considered wholly geographically separate, regular dispersal from one population to the other population would

need to occur (e.g., semifrequent dispersal events throughout the year), potentially including interbreeding between populations. Since 2015, four wolves dispersed from Mexico into the United States. Of those wolves, one was removed from the MWEPA due to depredation behavior, two dispersed back across the border into Mexico naturally, and one died of unknown causes (USFWS files). Based on radio-collar data, none of these dispersing wolves encountered other wild wolves during the dispersal event, nor have breeding events between Mexican wolves from the two populations occurred since the reintroduction in Mexico began. We are not aware of any Mexican wolves from the MWEPA that have dispersed into Mexico. One wolf in the MWEPA dispersed very close to the U.S.-Mexico border before turning around and moving back towards its territory in the MWEPA (USFWS files).

In the revised recovery plan and accompanying population viability analysis model, we hypothesized that successful dispersal (a dispersal event that does not end in mortality during dispersal) between the MWEPA and the current reintroduction area in northern Mexico would be infrequent (about one wolf every 12 to 16 years) (USFWS 2017a, p. 14; Miller 2017, pp. 47–49). The low level of estimated connectivity is based on potentially high levels of mortality associated with wolf dispersal events (Miller 2017, p. 9), low habitat quality across the borderlands (USFWS 2017a, pp. 12, 14; also see Martínez-Meyer 2017, p. 59), and the construction of the border wall, which includes a variety of deterrents and structures, some of which are impermeable to Mexican wolves (USCBP 2020). The demographic and genetic recovery criteria we developed were robust in the face of low expected connectivity across the border (Miller 2017, pp. 47–49), meaning that independent populations would be able to achieve the standards for threat alleviation we consider necessary for recovery either through dispersal between populations or through releases from captivity or translocations across the border, as

described in **Summary and Rationale for Proposed Changes to the Experimental Population Designation in Relation to Recovery**, above. Since the publication of the revised recovery plan, we have not observed a frequency of dispersal events suggesting that interconnectivity will be higher than what we previously estimated in our revised recovery plan and accompanying population viability analysis models.

In the 2015 10(j) rule, we stated that the experimental population in the MWEPA was wholly separate geographically from any nonexperimental population of Mexican wolves because the Mexican wolves in Mexico did not yet meet the definition of a population (80 FR 2512, January 16, 2015, p. 2549). We stated that if a population was successfully established in Mexico, an occasional dispersal event between the populations could occur. We also stated that interconnectivity between the two population could benefit recovery by providing genetic interchange between populations (80 FR 2512, January 16, 2015, p. 2550), which we subsequently restated in the revised recovery plan (USFWS 2017a, pp. 14–15). Although a second population of Mexican wolves does now exist in the wild in Mexico, we maintain our finding that the MWEPA population is wholly separate geographically from any nonexperimental population of Mexican wolves due to the lack of functional (regular or semi-frequent, or resulting in interbreeding) interconnectivity between the populations now or likely in the future.

Overview of the Proposed Experimental Population

The MWEPA is a large area in Arizona and New Mexico that includes Federal, State, Tribal, and private land. The MWEPA consists of three management zones that define areas for initial releases (the release of wolves from captivity to the wild) and translocations, and that allow wolf dispersal and occupancy (see definitions of Zone 1, Zone 2, and Zone 3 at 50 CFR

17.84(k)(3) and the map of the MWEPA designated area at 50 CFR 17.84(k)(4)). The MWEPA also includes a phased approach to translocations, initial releases, and occupancy of Mexican wolves west of Highway 87 in Arizona (see 50 CFR 17.84(k)(9)(iv)). We are not proposing to modify the management zones or phased approach, including the phasing evaluation periods, in this proposed rule. Regarding the phasing, we note that the minimum annual population count in 2019 (the year of the first phasing evaluation) was 163 Mexican wolves, which exceeded the 5-year phasing benchmark of reaching a population size greater than 150 Mexican wolves five years after February 17, 2015. We have not moved into Phase 2 at this time but may do so prior to the 8-year evaluation if agreed upon between the USFWS and participating State game and fish agencies.

Release Procedures

The USFWS and our partners release Mexican wolves into the MWEPA using several different management strategies, including the cross-fostering of captive pups into wild dens as a form of initial release; the initial release of adult or sub-adults individually, as pairs with and without pups, or as multigenerational packs; and translocations of wild wolves from one location to another. All methods of release can serve as useful strategies to manage the experimental population, and each has benefits and challenges within the context of our management needs at any point in time. In recent years, we have used cross-fostering as our primary release strategy because our initial attempts at cross-fostering have proven to be a successful method.

Importantly, it is a more accepted technique among the local public, our stakeholders, and our State partners than releases of adult wolves or a family group into an unoccupied area, although some members of the public continue to strongly support the release of adult pairs or packs. We may still release adult wolves or family groups under certain conditions, but we expect to use

cross-fostering as the primary release strategy to address the genetic needs of the experimental population.

Each year, we develop an initial release and translocation plan (available online at <https://www.fws.gov/southwest/es/mexicanwolf/>) with our partners that provides our objectives related to initial releases, translocations, and any targeted or potential removals (e.g., to prevent the breeding of highly related wolves) for the upcoming year. We base our near-term plans on the existing conditions in the MWEPA, the status of the captive population and availability of suitable adult wolves and/or pups for release, logistical considerations such as staffing for the USFWS and our partners, and our current and anticipated progress toward recovery.

We intend to continue releasing Mexican wolves from captivity into the MWEPA primarily to increase the gene diversity of the experimental population (see **Summary and Rationale for Proposed Changes to the Experimental Population Designation in Relation to Recovery**, above). In addition, we may release or translocate wolves for other management purposes such as replacing a mate for a breeding pair due to a wolf mortality. As explained above in *Overview of the Proposed Experimental Population*, we release Mexican wolves in the MWEPA in accordance with our management zones and phasing provisions. We intend to release a sufficient number of captive Mexican wolves to the MWEPA to ensure that at least 22 released wolves survive to breeding age, although we do not know the exact number of releases this will require, because it is dependent on the survival of released wolves. Based on the data we used in the revised recovery plan on first year mortality of wolves released from captivity into the MWEPA, we explained in the revised recovery plan that we will need to release at least 70 wolves, beginning with wolves released after December 31, 2015, in order for at least 22 to survive to breeding age and meet the genetic recovery criterion for the United States (USFWS 2017a, p. 23). We stated that, “The

number of releases required may increase or decrease if the survival of released wolves changes” (USFWS 2017a, p. 23). At the time of the revised recovery plan, we had little experience with the cross-foster release technique (2014–2016); therefore, our estimate of first-year release survival and the number of releases needed to achieve the criterion was not derived from cross-foster data.

If we continue to primarily use cross-fostering as a release technique to improve gene diversity in the MWEPA, the number of pups surviving to breeding age in a given year will reflect the cross-fostered pups placed in dens 2 years prior, or earlier, that have reached breeding age. This is because it takes 2 years from placement of the pup into a den for it to reach breeding age. Comparatively, adult or sub-adult releases have a lag of 1 year, as they would count as surviving to breeding age the year after their release. Therefore, our annual tally of released wolves surviving to breeding age will have a lag that reflects the age of the animals we have released. Currently, we estimate that cross-fostered Mexican wolf pups have similar survival to wild-born Mexican wolf pups (approximately 50 percent); however, more data are needed to enable us to predict the number of cross-fostered pups we will need to release in order to reach our genetic criterion in the revised recovery plan, which is also our proposed genetic objective in this proposed rule (see discussion under *Establishment of a Genetic Objective*, above). We note that any pups that have been cross-fostered from one wild den to another wild den (four pups as of spring of 2021) that reach breeding age will not count toward our genetic objective because they do not increase gene diversity in the MWEPA.

Prior to release from captivity into the wild, Mexican wolves receive permanent identification marks and radio collars (if appropriate for the age and size of the wolf), and their DNA profile is recorded to assist with ongoing pedigree analyses of the population. While not all Mexican wolves are radio-collared, we currently attempt to maintain at least two radio collars

per pack in the wild. Radio collars allow the USFWS to monitor reproduction, dispersal, survival, pack formation, depredations, predation, and other important biological metrics. We will continue monitoring Mexican wolves while they are listed under the ESA and for at least five years after delisting. A majority of wild Mexican wolves may not have radio collars as the population grows.

Any Mexican wolf found outside of the MWEPA would have either dispersed out of the MWEPA or across the border from Mexico. A combination of identification mechanisms, such as identification marks, radio collars, DNA analysis, and ongoing monitoring will make identification of the population of origin probable. It is possible that gray wolves could disperse from other regions such as the northern Rocky Mountains into Arizona and New Mexico. These gray wolves are typically larger in size and may have distinctive coats, such as all black or white, that make them distinguishable from Mexican wolves, in addition to any identification mechanisms from the management areas from which they dispersed.

How Does the Experimental Population Contribute to the Conservation of the Species?

The MWEPA has been the cornerstone of Mexican wolf recovery in the United States since its designation in 1998. Then, as now, the MWEPA is the only place in the United States where a population of Mexican wolves exists in the wild. The experimental population remains the focus of our recovery efforts in the United States and plays a significant role in the long-term conservation and recovery of the Mexican wolf. Specifically, the USFWS intends for the MWEPA population to achieve the recovery criteria for the United States population provided in the revised recovery plan (USFWS 2017a, pp. 18–25) (see **Recovery Efforts**, above). As such, we are proposing population and genetic objectives for the MWEPA that would reduce threats consistent with the recovery needs of the Mexican wolf. Also, we are proposing to temporarily

restrict the use of three take provisions in support of achieving the genetic objective and furthering Mexican wolf conservation and recovery.

Possible Adverse Effects on Wild and Captive Breeding Populations

Adverse effects on extant populations of the Mexican wolf, including the captive population and the wild population in Mexico, as a result of removal of individuals for introduction into the MWEPA will not occur for the following reasons:

The Mexican wolf reintroduction in the MWEPA was established beginning in 1998 using Mexican wolves bred and housed in captivity because no wild Mexican wolves existed for translocation into the MWEPA. We continue to use captive animals for release into the MWEPA today. As of June 30, 2020, 369 captive Mexican wolves were managed as a single captive population across 55 participating facilities (Scott et al. 2020, p. 7). The primary purpose of the captive-breeding program is to supply wolves for reestablishing Mexican wolves into the wild. Mexican wolves selected for release from the captive-breeding program are genetically well-represented in the captive population, thus minimizing any adverse effects on the genetic integrity of the remaining captive population. The Mexican Wolf SSP maintains detailed lineage information on each captive Mexican wolf and establishes annual breeding objectives to maintain the genetic diversity of the captive population (Scott et al. 2020, entire). The Mexican Wolf SSP meets with the agencies responsible for Mexican wolf reintroduction in the United States and Mexico annually to discuss release objectives for the year ahead.

The captive population remains capable of supporting both the U.S. and Mexico populations of wild Mexican wolves. Over the course of the reintroduction from 1998 to December 31, 2020, we have released 146 captive wolves to the MWEPA, including the release of 51 wolves (1 adult, 50 pups) between January 1, 2015, and December 31, 2020, to improve

gene diversity (USFWS files). For clarity, only releases subsequent to December 2015 count toward the genetic criterion in the revised recovery plan (USFWS 2017a, p. 23). Mexico has released 49 captive wolves between 2011 and February 24, 2021 (USFWS files). This proposed rule recommends a higher number of releases to the wild than the 2015 10(j) rule (see *Release Procedures*, above) but that is well within the current capacity of the captive program (Miller 2017, p. 42). Releases from the SSP facilities can benefit the captive-breeding program by freeing up space for additional breeding of Mexican wolves in captivity, which can slow the loss of genetic diversity (Scott et al. 2020, p. 9; also see Mechak et al. 2016, pp. 1–15). Based on our proposed revisions described in this document, we will release a sufficient number of captive Mexican wolves to the MWEPA such that at least 22 survive to breeding age and the gene diversity in the MWEPA represents approximately 90 percent of the gene diversity available in captivity.

No wolves have been removed from the wild in Mexico for translocation (i.e., release) into the MWEPA since Mexico began releasing wolves to the wild in 2011. We do not need to translocate wolves from the wild Mexico population into the United States to assist the growth or stability of the MWEPA population due to the growth already occurring in the MWEPA population. We recognize that Mexico is still in the early phases of establishing a population, and at its current small size, it could not support occasional or frequent removal of wolves for translocation to the United States. In the biological report that accompanies the revised recovery plan, we investigated release scenarios with various levels of translocation of Mexican wolves from the United States to Mexico, but not the reverse, for this reason (Miller 2017, pp. 16–38). We recognize the importance of supporting Mexico in achieving the recovery criteria in Mexico, and we would not request removal of wolves from Mexico for translocation to the United States

unless it were beneficial for both populations. If we requested translocation of Mexican wolves from Mexico, it would be on a very limited basis for a specific reason, such as to improve gene diversity in the recipient population and reduce mean kinship in the donor population. Therefore, any translocations from Mexico to the United States would be sufficiently rare and assessed for mutual benefit so as to have no adverse impacts on the wild population in Mexico. We will continue to rely on the captive population for our release needs in the MWEPA.

Likelihood of Population Establishment and Survival

As we stated in the 2015 10(j) rule, the experimental population has consistently demonstrated signs of establishment, such as wolves establishing home ranges and reproducing (80 FR 2512, January 16, 2015, p. 2551). Since the publication of the 2015 10(j) rule, the population has continued to exhibit these signs. 2020 marked the 19th year in which wild-born Mexican wolves bred and raised pups in the wild (USFWS files), demonstrating sustained natural reproduction. The population has exhibited steady growth under the 2015 10(j) rule, from a minimum of 112 to 186 wolves from the end of 2014 through 2020. During the same time period, the number of breeding pairs increased from 9 to 20, and the population expanded geographically from 7,255 mi² (18,790 km²) to 19,495 mi² (50,492 km²) (USFWS 2014; USFWS files). Substantial areas of high-quality habitat remain unoccupied in the MWEPA, allowing for continued geographic expansion of the population as it increases numerically.

As discussed in *Threats/Causes of Decline*, above, we actively manage to lessen or alleviate threats to the Mexican wolf throughout the MWEPA. Also, as discussed in **Recovery Efforts**, above, we continue to demonstrate our commitment to the recovery of the Mexican wolf through our use of regulatory tools, evolving field techniques, law enforcement, and partnerships and outreach. Based on the biological characteristics of the population, including its

demonstrated growth and expansion, coupled with the ongoing intensive management and monitoring efforts of the USFWS and our partners, and our demonstrated adaptive and collaborative management approach, the population in the MWEPA is established and the likelihood of survival is extremely high.

Effects of the MWEPA Population on Recovery Efforts

Continuing the effort to reestablish the experimental population will have significant, direct, immediate, and long-term measurable benefit to the recovery of the Mexican wolf. As discussed above in **Recovery Efforts**, the revised recovery plan states that recovery of the Mexican wolf will be achieved when two self-sustaining populations—one in the United States and one in Mexico—have been established and safeguarded from threats as provided for by the recovery criteria and actions in the plan. The USFWS intends for the experimental population in the MWEPA to serve as the population that will achieve the recovery criteria for the United States. Our proposed population objective, genetic objective, and temporary restriction of three take provisions are intended to ensure that the experimental population in the MWEPA supports our efforts to achieve the long-term conservation and recovery of the Mexican wolf.

Actions and Activities that May Affect the Introduced Population

Consistent with our findings in the past (63 FR 1752, January 12, 1998, p. 1755; 80 FR 2512, January 16, 2015, p. 2551), we do not foresee that the introduced population will be adversely affected by existing or anticipated Federal or State actions or private activities. We expect that anticipated Federal, State, or Tribal actions or private activities will not negatively affect the experimental population's ability to increase numerically or continue to expand into suitable habitat in the MWEPA, but some activities could affect individual wolves.

We expect Mexican wolves in the MWEPA to primarily occupy forested areas on Federal lands due to the availability of prey in these areas and supportive management regimes. We expect the majority of the Mexican wolf population to occur on Federal lands within Zones 1 and 2 of the MWEPA, but we also recognize that Mexican wolves may seek to inhabit suitable habitat on Tribal or private lands or may disperse through or occasionally occupy less-suitable habitat of various land ownership types in Zones 2 and 3.

Zone 1, the area where Mexican wolves may be initially released from captivity or translocated, is comprised of the Apache, Gila, and Sitgreaves National Forests; the Payson, Pleasant Valley, and Tonto Basin Ranger Districts of the Tonto National Forest; and the Magdalena Ranger District of the Cibola National Forest. The USFS manages these areas to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations. The National Forests are responsible for developing and operating under a land and resource management plan, which outlines how each of the multiple uses on the forest will be managed. The USFS is a signatory to the 2019 MOU and actively participates in daily management of the experimental population (see *Is the Experimental Population Essential to the Continued Existence of the Species in the Wild?* below, for additional discussion of the USFS's role and contributions to the management and recovery of the Mexican wolf in the MWEPA). We anticipate that individual Mexican wolves or wolf packs may be affected by actions and activities associated with ranching activities on public land, because wolves that depredate livestock or display nuisance behavior may be hazed or removed.

Zone 2 of the MWEPA contains a matrix of land ownerships, including Federal (*e.g.*, USFS, Bureau of Land Management, Department of Defense), State, private, and Tribal lands. A variety of actions and activities may occur throughout this zone, such as recreation, agriculture

and ranching, urban and suburban development, and military operations. Similar to Zone 1, we anticipate that individual Mexican wolves or wolf packs may be affected by actions and activities occurring on private or Tribal land in Zone 2, such as ranching operations, because wolves that depredate livestock or display nuisance behavior may be hazed or removed. We will continue to establish management actions in cooperation with private landowners and Tribal governments to support the recovery of the Mexican wolf on private and Tribal lands, and we will continue our efforts to support programs that fund depredation compensation and preventative/proactive management activities aimed at reducing wolf-livestock conflicts.

Road and human densities have been identified as potential limiting factors for colonizing wolves in the Midwest and Northern Rocky Mountains due to the mortality associated with these landscape characteristics (Mladenoff et al. 1995, entire; Oakleaf et al. 2006, pp. 558–561). Vehicular collision in particular is not identified as having a significant impact on the Mexican wolf population, although it may contribute to the overall vulnerability of the population due to its small population size and cumulative effects of multiple factors, including inbreeding and illegal shooting of wolves (80 FR 2488, January 16, 2015, p. 2503). We recognize that human and road densities in the MWEPA are within the recommended levels for Mexican wolf colonization, and are expected to remain so in the future; therefore, we see the impact to the population from actions related to human development as minimal within the areas we expect Mexican wolves to primarily inhabit in Zones 1 and 2. More information about vehicular collisions can be found in the final rule determining endangered status for the Mexican wolf (80 FR 2488, January 16, 2015).

The border wall along the southern boundary of the MWEPA in Zones 2 and 3 may affect Mexican wolves that try to disperse southward from the MWEPA or northward from Mexico.

We expect these dispersal occurrences to be fairly rare, as discussed in *Location and Boundaries of the Proposed Experimental Population*, above. Such occurrences will only be affected if dispersal activity is blocked or altered by the border wall.

Experimental Population Regulation Requirements

Appropriate Means to Identify the Experimental Population

The location of the experimental population is the MWEPA, as defined at 50 CFR 17.84(k). Mexican wolves will move throughout the MWEPA in their daily feeding and sheltering activities. We can identify Mexican wolves based on the permanent identification marks we give them prior to release, or by radio collar, DNA analysis, or visual observation.

Is the Experimental Population Essential to the Continued Existence of the Species in the Wild?

The ESA instructs us to determine whether a population is essential to the continued existence of an endangered or threatened species. Our regulations define “essential experimental population” as an experimental population whose loss would be likely to appreciably reduce the likelihood of survival of the species in the wild (50 CFR 17.80(b)). The USFWS defines “survival” as the condition in which a species continues to exist in the future while retaining the potential for recovery (USFWS and National Marine Fisheries Service 1998). Inherent in our regulatory definition of “essential experimental population” is the impact the potential loss of the experimental population would have on the species as a whole (49 FR 33885; August 27, 1984). All experimental populations not meeting this bar are considered “nonessential” (50 CFR 17.80(b)).

We designated the Mexican wolf experimental population in the MWEPA as nonessential in 1998 (63 FR 1752; January 12, 1998). The March 31, 2018, Order instructs us to make a new essentiality designation because our geographic expansion of the MWEPA in the 2015 10(j) rule

would result in Mexican wolf occupancy outside of areas previously considered when we made our 1998 essentiality determination. We now propose to maintain the designation of the experimental population in the MWEPA as nonessential based on the following information and considerations:

Reestablishing a species, is by its very nature, an experiment for which the outcomes are uncertain. However, it is always our goal to successfully reestablish a species in the wild so that the species can be recovered and removed from the Federal List of Endangered and Threatened Wildlife. This is consistent with the ESA's requirements for section 10(j) experimental populations. Specifically, the ESA requires experimental populations to further the conservation of the species. At 16 U.S.C. 1532(3), the ESA defines conservation as the use of all methods and procedures which are necessary to bring any endangered or threatened species to the point at which the measures provided pursuant to the ESA are no longer necessary. In short, experimental populations serve the species' recovery.

The importance of an experimental population to a species' recovery does not mean the population is "essential" under section 10(j) of the ESA. All efforts to reestablish a species are undertaken to move that species toward recovery. If importance to recovery was equated with essentiality, no reestablished populations of a species would qualify for nonessential status. This interpretation would conflict with Congress' expectation that "in most cases, experimental populations will not be essential" (H.R. Conference Report No. 835, *supra* at 34; 49 FR 33885, August 27, 1984). Therefore, although we have indicated that we will manage the MWEPA population to achieve the recovery criteria for the U.S. population of Mexican wolves, the MWEPA population's importance to recovery does not equate with the MWEPA being designated as essential.

In the final rule published on January 12, 1998 (63 FR 1752), we determined that the experimental population was not essential to the survival of the species in the wild based on the current and expected future availability of Mexican wolves in captivity that would be available for release to the wild. Just prior to the 1998 designation, the captive program included 148 animals in 44 facilities in the United States and Mexico. We stated in the 1998 designation that the captive population had doubled in size over the previous 3 years, demonstrating its reproductive potential to replace reintroduced wolves that died (63 FR 1752, January 12, 1998, p. 1753). While we expected that some wolves would die after removal from the captive population, we also expected that the captive population had the capacity to support another reintroduction attempt in the extreme event that the entire population died. We established an expectation from the earliest days of the reintroduction that wolves released to the wild would be genetically redundant to wolves in captivity, such that no unique genes would be lost if released wolves did not survive. This approach ensured the genetic integrity of the captive population and the survival of the subspecies. We stated that the genetic management of the captive population would be conducted by the American Zoo and Aquarium Association's SSP program, using state-of-the-art technology and being guided by an expert advisor specializing in small population management.

Now, taking into consideration our expansion of the MWEPA in the 2015 10(j) rule and the growth of the MWEPA population since the reintroduction began, we maintain our position that the captive population serves as a safeguard for the survival of the Mexican wolf in the wild. Although the revised geography of the MWEPA results in Mexican wolves occupying new areas south of I-40 in Arizona and New Mexico south to the international border with Mexico, wolves that may occupy any area within the revised MWEPA are part of the same experimental

population we initiated in 1998. Our previous rationale stands for this now enlarged area: even if the entire population in the MWEPA died, which is extremely unlikely (see *Likelihood of Population Establishment and Survival*, above), animals from captivity would be available to reintroduce to the wild to reestablish the population. In fact, the captive population is more capable of producing genetically redundant wolves for release than it was in 1998, due to its increased size. As of June 30, 2020, the captive population housed 369 wolves in 55 facilities (Scott et al. 2020, p. 7). Many of the facilities that house and breed wolves in captivity have been doing so for two to three decades, demonstrating a firm commitment as a partner in this effort and gaining considerable experience in husbandry and rearing techniques. The SSP continues to annually meet or exceed its goal to maintain a captive population of 300 wolves. The captive population could be expanded beyond its current size with the addition of more participating facilities that would enable more wolves to be placed into breeding situations (Scott et al. 2020, p. 7).

In addition to the capacity of the captive population to produce the number of wolves that would be necessary to reinitiate a reintroduction, the SSP continues to demonstrate rigorous management of the genetic integrity of the captive population. The SSP prioritizes the breeding of select individuals, and multiple facilities and institutions within the SSP invest in gamete collection and preservation for use in promising assisted reproductive technologies that allow individual wolves to contribute genetically to the population after their death (Scott et al. 2020, pp. 82–83). The rigorous management of the captive facilities combined with the increasing exploration of and potential to use reproductive technologies further strengthen our position that the captive population has the current capacity and demonstrated record of accomplishment to

produce Mexican wolves for release to ensure the survival and recovery of the Mexican wolf in the wild.

We propose our designation in recognition that the gene diversity of the captive population will slowly decline over time. The 2020 SSP masterplan for the Mexican wolf states, “Currently this population could maintain only 75% gene diversity for 59 years and would be expected to maintain 72.3% after 100 years (Scott et al. 2020, p. 9).” We acknowledge that the captive population is based on a small number of founders with no possibility of new Mexican wolf founders that could add gene diversity, which limits the gene diversity of the captive Mexican wolf population and any wild population initiated with captive wolves. We also acknowledge that limited breeding capacity due to the number of captive facilities available for breeding coupled with the social structure of the species (not all wolves are breeders) will affect the rate of loss of gene diversity in the captive population over time (Scott et al. 2020, p. 9). However, these factors do not make the captive population unfit to serve as a source for additional reintroductions because the breeding of underrepresented founders, the addition of facilities for breeding events, and the use of reproductive technologies can be increased in order to slow the loss of gene diversity in the captive population. That is, the rate of gene loss can be controlled to a large degree by the management of the captive population. Loss of gene diversity in the captive population would limit future reintroduction potential if it occurred to such an extent that inbreeding effects were observed and resulted in wolves unfit for release. At the current time there is no indication of this, nor is there a specific degree of gene loss at which we have certainty this would occur. Therefore, while we recognize that gene diversity limitations have and will continue to persist, they are not occurring to a degree that curtails our ability to

consider a future reintroduction of Mexican wolves to the wild or for those wolves to retain the potential for recovery.

We also note the reintroduction of Mexican wolves in Mexico beginning in 2011, which has resulted in the establishment of a second population of wild Mexican wolves. This effort is a central part of the recovery effort for the Mexican wolf and is not dependent demographically on dispersal of wolves from the MWEPA for its establishment, although translocations from the United States may be undertaken for various management purposes. A loss of wolves in the MWEPA would not disable Mexico's ability to achieve recovery; meanwhile, the MWEPA population could be re-established.

We note that when the MWEPA was designated in 1998 (see 63 FR 1752; January 12, 1998), the Mexican wolf was protected as endangered through the gray wolf listing (see 43 FR 9607; March 9, 1978). We indicated our intent in that rule to conserve subspecies such as the Mexican wolf (43 FR 9607, March 9, 1978, pp. 9609–9610). As such, our designation of an experimental population of the Mexican wolf was in relation to the Mexican wolf subspecies, not the gray wolf species. Therefore, our rationale for designating the MWEPA as nonessential was also in relation to the Mexican wolf subspecies only and did not take into consideration other gray wolf populations (63 FR 1752; January 12, 1998). In 2015, we published a final rule (80 FR 2488; January 16, 2015) listing the Mexican wolf as an endangered subspecies to make its listing independent of the gray wolf species listing. This change in listing, from being part of a species-level listing to a subspecies listing, does not alter our above rationale related to the role of the captive population in our essentiality determination because, consistent with our original designation, we continue to consider the designation of the MWEPA in relation to the Mexican wolf subspecies.

As described in this proposed rule, the USFWS and our partners have over two decades of management experience that support our position that we could successfully reinstate a reintroduction. In 1998, we stated that in the event of the loss of the entire population, future reintroductions would be possible if the reasons for initial failure were understood (63 FR 1752, January 12, 1998, p. 1754). Not only have we not experienced any such initial failure, we have demonstrated success in growing the population to a minimum of 186 wild wolves. Along the way, we have engaged in adaptive management to hone effective release techniques and identify successful release locations and timing; we have developed and implemented depredation avoidance techniques; we have expanded our partnership network to bring additional expertise and capacity to bear; we have solidified our recovery goals and revised our management regulations; and we continue to integrate new technologies as they become available to track and monitor wolves and collect data. We are better informed and equipped now, and will be in the future, to initiate and manage a reintroduction than we were in 1998.

In addition to considering our logistical potential to conduct a new reintroduction and the degree to which the recovery potential of the Mexican wolf would be retained in such circumstances based on the status of the captive population, our finding of whether a population is essential is also made with our understanding that Congress enacted the provisions of the ESA's section 10(j) to mitigate fears that reestablishing populations of endangered or threatened species into the wild would negatively impact landowners and other private parties. Congress recognized that flexible rules could encourage recovery partners to actively assist in the reestablishment and hosting of such population on their lands (H.R. Conference Report. No. 97-567, at 8(1982)). Although Congress allowed experimental populations to be identified as either essential or nonessential, they noted that most experimental populations would be nonessential

(H.R. Conference Report No. 835, *supra* at 34; see 49 FR 33885, August 27, 1984). Mexican wolves, due to their status as a top predator, have created significant dissension and concern in local communities. In this regard, we note that we are in a unique position in making this finding as an extension of an existing experimental population, as opposed to a new population designation in another geographic area. Because of this, we consider it even more important to maintain the existing partnerships and management arrangements that we have built over the last two decades of the reintroduction because they enhance our ability to address local concerns and contribute to the recovery progress of the Mexican wolf. Our intent to establish a collaborative management scheme for the reintroduction has been evident since 1998, when we discussed the role of cooperating agencies in the management, identification, and monitoring of the reintroduced population (63 FR 1752, January 12, 1998, p. 1754). Currently, we manage the reintroduction pursuant to the 2019 MOU with a host of Federal and State agencies, a Tribe, and several counties and local governments, each of which plays a unique and important role. We recognize that changing course to an essential designation could result in challenges in maintaining these partnerships.

Section 7 of the ESA, titled Interagency Cooperation, outlines the procedures for Federal interagency cooperation to conserve Federally listed species and designated critical habitats. Section 7(a)(1) directs the Secretaries of the Interior and Commerce to review other programs administered by them and utilize such programs to further the purposes of the ESA. It also directs all other Federal agencies to utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of species listed pursuant to the ESA. This section of the ESA makes it clear that all Federal agencies should participate in the conservation and recovery of listed endangered and threatened species. Under this provision, Federal agencies

often enter into partnerships and memoranda of understanding with the USFWS to implement and fund conservation agreements, management plans, and recovery plans for listed species.

The primary land management agency within the MWEPA is the USFS, which manages land under a multiple use mandate. The USFS is a signatory to the 2019 MOU for Mexican Wolf Recovery and Management. According to the 2019 MOU, the USFS will provide a liaison to the Interagency Field Team (IFT) to: (1) Serve as the primary liaison between the IFT and USFS on all Mexican wolf issues that pertain to USFS-managed lands, USFS permittees, and other users; (2) provide coordination between the various USFS district rangers/wildlife staff/regional office and the IFT on wolf-related activities and issues; (3) provide assistance and input on IFT issues and priorities; and (4) facilitate obtaining necessary USFS authorizations, permits, environmental analyses, and closure orders.

The USFS has implemented proactive conservation efforts for the Mexican wolf on a multiple use landscape. The USFS districts work closely with the IFT and meet at least four times per year to coordinate the following:

- Review locations of current wolf territories and den/rendezvous sites to coordinate with planned land management actions (including range, fire, timber, recreation) and mitigate potential impacts;
- Coordinate with each district in developing a district-specific livestock carcass removal strategy so that carcasses can be removed from grazing allotments when appropriate to reduce potential wolf/livestock conflict;
- Attend annual operating instructions meetings with range conservationists and individual livestock permittees to review allotment-specific wolf information and develop conflict reduction strategies;

- Update the district range conservationist when depredations occur and explore strategies to reduce conflicts;
- Update livestock permittees approximately every 2 weeks on new wolf locations on their allotments with the intent of reducing wolf/livestock conflicts, encouraging proactive measures, and improving information exchange with the wolf biologist(s) assigned to that area;
- Coordinate with nongovernmental organizations for funding of proactive measures in areas with high depredation rates; and
- Coordinate to help ensure successful implementation of cross-fostering efforts on USFS lands to reach genetic recovery goals.

For the ESA's section 7 consultation purposes, section 10(j) requires the following:

- Any nonessential experimental population located outside a National Park or National Wildlife Refuge System unit is treated as a proposed species for the purposes of section 7 (conference may be conducted);
- Any essential population is treated as a threatened species for purposes of section 7 consultation (standard consultations are conducted);
- Critical habitat may be designated for essential experimental populations (standard consultations are conducted), but not for nonessential experimental populations; and
- All populations of the species (including populations designated as experimental) are considered to be a single listed entity when making jeopardy determinations or other analyses in a section 7 consultation.

By definition, a “nonessential experimental population” is not essential to the continued existence of the species. Therefore, no proposed action impacting a population so designated

could lead to a jeopardy determination for the entire species. Because the USFS is implementing their section 7(a)(1) responsibilities, is a signatory to the 2019 MOU along with 13 other agencies and entities, and is implementing conservation measures, it is appropriate for the Mexican wolf to be treated as a proposed species for the purposes of section 7 under the nonessential designation.

Management Restrictions, Protective Measures, and Other Special Management

For Mexican wolves that occur outside the MWEPA due to dispersal activity, the ESA prohibits activities that “take” endangered and threatened species unless a Federal permit allows such “take.” Along with our implementing regulations at 50 CFR part 17, the ESA provides for “take” permits and requires that we invite public comment before issuing these permits. A permit issued by us under section 10(a)(1)(A) of the ESA authorizes activities otherwise prohibited by section 9 for scientific purposes or to enhance the propagation or survival of the affected species, including acts necessary for the establishment and maintenance of experimental populations. Our regulations regarding implementation of section 10(a)(1)(A) permits are found at 50 CFR 17.22 for endangered species.

We have developed a section 10(a)(1)(A) permit to allow for certain activities with Mexican wolves that occur both inside and outside the MWEPA. If Mexican wolves travel outside the MWEPA, we intend to capture and return them to the MWEPA or place them in captivity.

Review and Evaluation of the MWEPA Population

The USFWS will measure the success, failure, and effects of releases, translocations, proactive management, removals, and other management actions by monitoring, researching, and evaluating the status of Mexican wolves and their offspring in the MWEPA. Using adaptive

management principles, the USFWS will continue to modify subsequent management actions and strategies depending on what we learn and the status of the population. We will prepare periodic progress reports, annual reports, and publications, as appropriate, to evaluate our progress. The reviews and progress reports we foresee completing in the future include: quarterly updates and annual reports; five-year status evaluations pursuant to section 4(c)(2) of the ESA, with the next evaluations occurring in 2023 and 2028; 5- and 10-year recovery progress evaluations pursuant to the revised recovery plan, during which we will assess progress toward recovery based on data through 2022 and 2027 for the 5- and 10-year evaluations, respectively, and which will result in the publication of our evaluations in 2023 and 2028; the phasing evaluations for western Arizona as established in the 2015 10(j) rule, which occurred in 2020 and will occur in 2023; and an evaluation of this revised rule approximately 5 years after implementation begins, which would be based on data through the annual population count in 2027 and which we will synchronize with our 2027 recovery plan evaluation to ensure we conduct a wholistic review of the experimental population within the context of recovery, for publication in 2028.

Consultation with State Game and Fish Agencies, Local Governments, Tribes, Federal Agencies, and Private Landowners in Developing and Implementing This Proposed Rule

In accordance with 50 CFR 17.81(d), to the maximum extent practicable, this proposed rule represents an agreement between the USFWS, the affected State and Federal agencies, and persons holding any interest in land that may be affected by the establishment of this experimental population. We invited 60 Federal and State agencies, local governments, and Tribes to participate as cooperating agencies in the development of the DSEIS, 24 of which signed a memorandum of understanding (MOU). The purpose of this MOU was for the signatory

entities to contribute to the preparation of the DSEIS that analyzes the proposed revisions to the regulations for the MWEPA. The revisions proposed in this rule directly reflect the input of State game and fish agencies, local governmental entities, and affected Federal agencies.

In April 2020, we notified the Tribal governments of all the Native American Tribes in Arizona and New Mexico of our intent to prepare a proposed revised 10(j) rule and DSEIS. We held several Tribal working group meetings to provide opportunity for input, discuss the current status of the DSEIS development, and address issues raised by the Tribes. We also provided updates and opportunities for Tribal input to our process during Tribal coordination meetings convened by the Arizona Ecological Services Field Office in Phoenix, Arizona, and the New Mexico Ecological Services Field Office in Albuquerque, New Mexico.

Due to the difficulty of conducting in-person meetings during the COVID-19 pandemic, we conducted most meetings related to this process via virtual video or telephone meetings. We met with affected Federal and State agencies, representatives from local and Tribal governments, and stakeholder groups representing interested parties to discuss the proposed rule and DSEIS. We met with the Arizona Game and Fish Department and New Mexico Department of Game and Fish to collect data for the biological resources and economics analyses and to discuss proposed revisions. We coordinated regularly to discuss their issues and recommendations.

In addition to the coordination provided specific to the development of the proposed rule and DSEIS, we note that we also conduct the management and recovery of the Mexican wolf within an interagency framework that is defined by our 2019 MOU (see **Recovery Efforts**, above).

Numerous other entities and individuals provided comments during scoping or at other times during our process that did not reflect the best available scientific and commercial

information or contribute to the conservation and recovery of the species. It is not practicable for this proposed rule to represent an agreement between the USFWS and all persons holding any interest in land that may be affected by the revision to the designation of this experimental population. We reviewed approximately 87,000 public scoping comments to develop this proposed rule and the DSEIS. We will hold virtual public meetings and hearings during the public comment period for this proposed rule and the DSEIS (see **DATES** and **ADDRESSES**, above), and we will consider all comments we receive during the open public comment period in the development of our final rule and final SEIS.

Peer Review

In accordance with joint policy published in the *Federal Register* on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. We have provided copies of this proposed rule to three or more appropriate and independent specialists in order to solicit comments on the scientific data and assumptions we used. The purpose of such review is to ensure that the final determination is based on scientifically sound data, assumptions, and analyses. As directed by the USFWS Peer Review Policy dated July 1, 1994 (59 FR 34270), and a recent memo updating the peer review policy for listing and recovery actions (August 22, 2016), we will invite peer reviewers to comment on our methods and conclusions, and provide additional information, clarifications, and suggestions to improve the final determination. We will consider their comments and information on proposed modifications during preparation of a final rule. Accordingly, the final decision may differ from this proposal.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

Executive Order 12866 provides that the Office of Information and Regulatory Affairs in the Office of Management and Budget will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation’s regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The Executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. Executive Order 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this proposed rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996; 5 U.S.C. 801 *et seq.*), whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare, and make available for public comment, a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the Regulatory Flexibility Act to require Federal agencies

to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. We certify that this proposed rule would not have a significant economic effect on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include such businesses as manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and forestry and logging operations with fewer than 500 employees and annual business less than \$7 million. To determine whether small entities may be affected, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

Importantly, the impacts of a rule must be both significant and substantial to prevent certification of the rule under the Regulatory Flexibility Act and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed rule, but the per-entity economic impact is not significant, the USFWS may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the USFWS may also certify.

In our 2015 10(j) rule, we found that the experimental population would not have significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act. The 2015 10(j) rule expanded the geographic boundaries of the MWEPA, established new management zones with provisions for initial release and translocation of Mexican wolves, revised and added allowable forms of take, and clarified definitions. We concluded that the rule would not significantly change costs to industry or governments. Furthermore, the rule produced no adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S. enterprises to compete with foreign-based enterprises in domestic or export markets. We further concluded that no significant direct costs, information collection, or recordkeeping requirements were imposed on small entities by the action and that the rule was not a major rule as defined by 5 U.S.C. 804(2) (80 FR 2512, January 16, 2015, pp. 2553–2556).

Under this proposal, we would modify the population objective, establish a genetic objective, and temporarily restrict three of the forms of take of Mexican wolves in the MWEPA that we adopted in the January 16, 2015, final rule. We are proposing these revisions to ensure the long-term conservation and recovery of the Mexican wolf. In addition, we are proposing to maintain the nonessential designation for the experimental population. We are not proposing to revise the geographic boundaries of the MWEPA.

Because of the regulatory flexibility for Federal agency actions provided by the MWEPA's 10(j) designation, we continue to expect this rule not to have significant effects on any activities within Federal, State, or private lands within the experimental population. In regard to section 7(a)(2) of the ESA, except on National Park Service and National Wildlife Refuge System lands, the population is treated as proposed for listing, and Federal action agencies are

not required to consult on their activities. Section 7(a)(4) of the ESA requires Federal agencies to confer (rather than consult) with the USFWS on actions that are likely to jeopardize the continued existence of a species. However, because a nonessential experimental population is, by definition, not essential to the survival of the species, conferencing is unlikely to be required within the MWEPA. Furthermore, the results of a conference are strictly advisory in nature and do not restrict agencies from carrying out, funding, or authorizing activities. In addition, section 7(a)(1) of the ESA requires Federal agencies to use their authorities to carry out programs to further the conservation of listed species, which would apply on any lands within the experimental population area. As a result, and in accordance with these regulations, if we adopt this rule as proposed, some modifications to the Federal actions within the experimental population area may occur to benefit the Mexican wolf, but we do not expect projects on Federal lands to be halted or substantially modified as a result of these regulations.

However, this proposed rule would allow a larger population of Mexican wolves to occupy the MWEPA, which has the potential to affect a greater number of small entities involved in ranching and livestock production, particularly beef cattle ranching (business activity code North American Industry Classification System (NAICS) 112111), sheep farming (business activity code NAICS 112410), and outfitters and guides (business activity code NAICS 114210). Small entities in these sectors may be affected by Mexican wolves depredating on, or causing weight loss of, domestic animals (particularly beef cattle), or preying on wild native ungulates, respectively. We have updated our assessment to small entities in the DSEIS.

Small businesses involved in ranching and livestock production may be affected by Mexican wolves depredating on domestic animals, particularly beef cattle. Direct effects to small businesses could include foregone calf or cow sales at auctions due to depredations. Indirect

effects could include impacts such as increased ranch operation costs for surveillance and oversight of the herd, and weight loss of livestock when wolves are present. Ranchers have also expressed concern that a persistent presence of wolves may negatively impact their property and business values. We do not foresee a significant economic impact to a substantial number of small entities in the ranching and livestock production sector based on the following information:

The small size standard for beef cattle ranching entities and sheep farms as defined by the Small Business Administration are those entities with less than \$1.0 million in average annual receipts (<http://www.sba.gov/content/summary-size-standards-industry-sector>). We consider close to 100 percent of the cattle ranches and sheep farms in Arizona and New Mexico to be small entities. The 2017 Census of Agriculture reports that there were 7,057 cattle and calf operations and 7,509 sheep farms in Arizona, and 10,880 cattle and calf operations and 4,047 sheep farms in New Mexico.

Of the approximately 18,000 cattle ranches in Arizona and New Mexico, 12,334 occur in counties in the MWEPA (2017 Census of Agriculture data by county). These operations account for approximately 69 percent of the total for both States. The actual number of ranches within the project area is far less than this estimate because several counties extend beyond the borders of the project area or the ranches occur in areas where we do not expect wolf occupancy due to low habitat suitability. The Agricultural Census does not report sub-county farms or inventory, so relying on the county numbers is the best available data for estimating the number of potentially affected small ranching operations.

Cattle ranches vary significantly in herd size, with classifications ranging from a herd of 1 to 9 animals, to those with more than 2,500 animals (2017 Census of Agriculture). Over 80 percent of these ranches have fewer than 50 head of cattle.

We assessed whether a substantial number of entities would be impacted by this proposed rule by estimating the annual number of depredations we expect to occur within the project area when the Mexican wolf population will be at its largest. Between 1998 and 2019, on average, there were 151 total depredations (confirmed and unconfirmed) by Mexican wolves in any given year, which equates to 1.7 cow/calves killed for every Mexican wolf. Based on this, we estimate the average number of cattle killed (both confirmed and unconfirmed) in any given year for 320 wolves will be 544 individuals. We expect the experimental population to grow from its current minimum population estimate of 186 wolves to an 8-year average population of 320. Assuming that one cow is depredated per ranch, we expect the number of affected ranches to increase from 151 ranches to 544 ranches when the wolf population reaches 320 individuals. At this point, if each expected depredation affects a unique ranch, then a total of approximately four percent of ranches in the area would be impacted.

To the extent that some cattle ranches will most likely not be impacted by wolf recovery because they are not located in suitable habitat but are included in the total estimate of potentially affected ranches because the Agricultural Census does not provide data at a sub-county level, this estimate could understate the percentage of ranches potentially affected. However, for other reasons, this estimate could very well overstate the percentage of cattle ranches affected as we recognize that annual depredation events have not been, and may not be, uniformly distributed across the ranches operating in occupied wolf range. Rather, wolves seem to concentrate in particular areas, and to the extent that livestock are targeted by the pack for depredations, some ranch operations will be disproportionately affected. Therefore, it is more likely that fewer than 544 ranches may experience more than one depredation, rather than each of 544 ranches experiencing one depredation.

Compared to the 2017 total inventory of estimated ranch cattle (259,192) for the project area of the Blue Range Wolf Recovery Area (BRWRA), both confirmed and unconfirmed depredations per 100 Mexican wolves account for 0.2 percent of the herd size. The economic cost of Mexican wolf depredations in this time period has been a small percentage of the total value of the livestock operations. With a population objective of an average of 320 Mexican wolves in the MWEPA, the expected value of 544 cattle (174.3 cattle killed per 100 Mexican wolves on average for any year) at auction based on a weighted average market value for a depredated cow/calf of \$1,094.72 (\$2020), the total annual impact would be \$595,500. If depredations uniquely affect a separate operation, then a total of 544 operations would incur an expected corresponding loss of \$1,095.

Small businesses involved in ranching and livestock production could also be indirectly affected by weight loss of livestock due to the presence of Mexican wolves. For example, livestock may lose weight because wolves force them off suitable grazing habitat or away from water sources. Livestock may try to protect themselves by staying close together in protected areas where they are more easily able to see approaching wolves and defend themselves and their calves. A consequence of such a behavioral change would likely be weight loss, especially if the wolves are allowed to persist in the area for a significant amount of time because the cattle would be afraid to spread out to find more lucrative forage areas. Weight loss could also occur if the presence of wolves causes the herd to move around more rapidly as they try to keep away from wolves. Based on Ramler et al. 2014, weight loss of cattle is associated with the ranches that have suffered depredations. Therefore, we would expect the same ranches—that is, 544 ranches or fewer—that are impacted by depredations to potentially be impacted by weight loss of

their cattle. Because wolves' tendency to prey on cattle is localized, we would not expect all 544 ranches and their associated herds to be impacted.

Using a mid-point estimate of 6 percent weight loss for calves at the time of auction, we calculated the impact on 2019 model ranches assuming that wolf presence pressures were allowed to persist throughout the foraging year. Based on mean market prices, a 6 percent weight loss for the herd at the time of sale could result in a profit loss of \$3,079 to \$16,613 depending on the size of the ranch. Under such a scenario, an affected ranch could incur a 20 percent loss in profit using the model ranch assumptions discussed in the report. This, however, is likely an overestimate of impacts that would occur, as once wolves are detected in an area, a variety of proactive and reactive management tools are available to the landowner or the USFWS and our designated agencies such that wolf presence would not persist throughout a foraging year.

This proposed rule is based on alternative one in our DSEIS. Under this alternative, the experimental population regulations would continue to offer several forms of harassment and take of Mexican wolves on Federal and non-Federal land to address conflict situations between wolves and livestock, although we are also proposing to temporarily restrict two of these until we reach the proposed genetic objective of 22 released wolves surviving to breeding age. The regulations would also continue to provide for initial release of captive wolves into suitable habitat in Zones 1 and 2, and we have demonstrated our intention to reduce nuisance behavior associated with adult releases by using the cross-fostering technique. Further, depredation compensation programs are available to offset some of the economic impacts of livestock depredations (see **Recovery Efforts**, above); these payments fully offset the impacts of confirmed depredations for some operators but do not fully offset impacts for all operators, such as those who experience unconfirmed losses for which payment is not provided.

Based on the preceding information, we find that the impact of direct and indirect effects of Mexican wolf depredations on livestock is not significant and substantial. That is, if impacts are evenly spread, less than 5 percent of small ranches in the MWEPA will be impacted, which we do not consider to be a substantial number. If impacts are disproportionately felt (several ranchers bear the burden of the depredations), the number of affected ranches will be even less (not substantial), but the impact to those affected may be significant depending on the number of cattle on the ranch and other characteristics.

Our proposed revision of the experimental designation may also impact small business entities associated with big game hunting, due to wolves' predation on wild ungulates, specifically elk, in the MWEPA. Effects to small businesses in this sector could occur from impacts to big game populations, loss of hunter visitation, or a decline in hunter success, leading to lost income or increased costs to guides and outfitters. We would expect impacts to big game hunting to potentially occur from the increased number of wolves in the MWEPA under our proposed population objective or from the temporary restriction of the provision for take in response to an unacceptable impact to a wild ungulate herd. Negative impacts to the big game hunting economic sector would be most likely to occur during the period that this take provision is restricted because State agencies would not be able to request the removal of wolves if they are causing ungulate herds to fall below management goals (i.e., an unacceptable impact).

As we describe in the DSEIS, we do not have a high degree of certainty as to when impacts to ungulates may occur, but we speculate based on information from gray wolves in other geographic areas that impacts will not occur prior to the wolf-to-1,000-elk ratio reaching above 4 wolves to 1,000 elk (potentially around 2024). We expect to meet our proposed genetic objective by 2030, resulting in the temporary restriction of this take provision for not more than

6 years. After the proposed genetic objective is reached and the restriction on this take provision would be lifted, the States could request the removal of wolves causing unacceptable impacts, which would result in mitigation of any reduction in hunting revenue occurring in that area. Currently, we do not have information suggesting that impacts have occurred. No observable impact on wild ungulates due to wolves has been documented, nor reductions in big game hunting. In Arizona, total harvest of elk and percent success of hunters increased from 2012 to 2017 (the most recent year for which we have data) (Hunt Arizona 2011 and 2017, Survey, Harvest and Hunt Data for Big and Small Game), and stayed stable or increased slightly in New Mexico from 2012 to 2019 (NMDGF files).

For the above reasons and based on currently available information, we certify that, if adopted as proposed, the proposed revision to the existing nonessential experimental population designation of the Mexican wolf would not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*):

(1) This proposed rule would not “significantly or uniquely” affect small governments.

We have determined and certify pursuant to the Unfunded Mandates Reform Act that, if adopted, this rulemaking would not impose a cost of \$100 million or more in any given year on local or State governments or private entities. A Small Government Agency Plan is not required. Small governments would not be affected because the experimental designation would not place additional requirements on any city, county, or other local municipalities.

(2) This proposed rule would not produce a Federal mandate of \$100 million or greater in any year (i.e., it is not a “significant regulatory action” under the Unfunded Mandates Reform Act). The proposed revisions to the MWEPA would not impose any additional management or protection requirements on the States or other entities.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), this proposed rule does not have significant takings implications. When reestablished populations of federally listed species are designated as nonessential experimental populations, the ESA’s regulatory requirements regarding the reestablished listed species within the experimental population are significantly reduced. In the 1998 final rule (63 FR 1752; January 12, 1998), we stated that one issue of concern is the depredation of livestock by reintroduced Mexican wolves, but such depredation by a wild animal would not be a taking under the 5th Amendment. One of the reasons for the experimental population 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.

A takings implication assessment is not required because this proposed rule would not effectively compel a property owner to suffer a physical invasion of property and would not deny all economically beneficial or productive use of the land or aquatic resources. Damage to private property caused by protected wildlife does not constitute a taking of that property by a government agency that protects or reintroduces that wildlife. This proposed rule would substantially advance a legitimate government interest (conservation and recovery of a listed species) and would not present a barrier to all reasonable and expected beneficial use of private property.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), we have considered whether this proposed rule has significant federalism effects and have determined that a federalism summary impact statement is not required. This proposed rule would not have substantial direct effects on the States, on the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government. In keeping with Department of the Interior policy, we requested information from and coordinated development of this proposed rule with the affected resource agencies in New Mexico and Arizona. Achieving the population objective for the MWEPA, which serves as one of the recovery criteria for the Mexican wolf, will contribute to the rangewide recovery of the species, which will contribute to its eventual delisting and its return to State management. No intrusion on State policy or administration is expected, roles or responsibilities of Federal or State governments will not change, and fiscal capacity will not be substantially or directly affected. This proposed rule would operate to maintain the existing relationship between the State and the Federal Government. Therefore, this proposed rule does not have significant federalism effects or implications to warrant the preparation of a federalism summary impact statement under the provisions of Executive Order 13132.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (February 7, 1996; 61 FR 4729), we have determined that this proposed rule will not unduly burden the judicial system and will meet the requirements of sections (3)(a) and (3)(b)(2) of the Order.

Government-to-Government Relationship with Tribes

In accordance with the President’s memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of the Interior’s manual at 512 DM 2, we have notified the Native American Tribes within and adjacent to the nonessential experimental population area about the proposed rule and DSEIS. They have been advised through written contact, including informational mailings from the USFWS and email notifications to attend video and teleconference informational sessions, and will be provided an opportunity to comment on the DSEIS and proposed rule. If future activities resulting from this proposed rule may affect Tribal resources, the USFWS will communicate and consult on a government-to-government basis with any affected Native American Tribes in order to find a mutually agreeable solution.

Paperwork Reduction Act

This proposed rule does not contain any new collection of information that requires approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). OMB has previously approved the information collection requirements associated with permitting and reporting requirements associated with native endangered and threatened species, and experimental populations, and assigned the following OMB control numbers:

- 1018–0094, “Federal Fish and Wildlife Permit Applications and Reports—Native Endangered and Threatened Species; 50 CFR 10, 13, and 17” (expires 01/31/2024), and
- 1018–0095, “Endangered and Threatened Wildlife, Experimental Populations, 50 CFR 17.84” (expires 9/30/2023).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

We have prepared a draft supplemental environmental impact statement (DSEIS) pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with this proposed rule to revise the Mexican wolf experimental population designation. The purpose of the DSEIS is to identify and disclose the environmental consequences resulting from the proposed action of revising the existing experimental population designation of the Mexican wolf. On April 15, 2020, we published a notice of intent (85 FR 20967) to prepare the DSEIS, which opened a public scoping period from April 15, 2020, to June 15, 2020. We used the information gathered during scoping to inform the DSEIS and this proposed rule.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare statements of energy effects when undertaking certain actions. This proposed rule is not expected to significantly affect energy supplies, distribution, or use because the actions contemplated in this proposed rule involve the reintroduction of Mexican wolves. Mexican wolves reintroduced in the MWEPA do not change where, when, or how energy resources are produced or distributed. Because this action is not a significant energy action, no statement of energy effects is required.

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, or other appropriate recommendations.

References Cited

A complete list of all references cited in this proposed rule is available at <http://www.regulations.gov> at Docket No. FWS-R2-ES-2021-0103, or upon request from the Mexican Wolf Recovery Program, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this document are the staff members of the Mexican Wolf Recovery Program (see **FOR FURTHER INFORMATION CONTACT**).

Authority

The authorities for this action are the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*).

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245; unless otherwise noted.

2. Amend § 17.84, in paragraph (k), by:

a. Revising paragraph (k)(1);

b. Adding paragraphs (k)(7)(iv)(C)(1) and (2), (k)(7)(v)(A)(1) and (2), and (k)(7)(vi)(E);

c. Revising paragraph (k)(9)(iii);

d. Adding paragraph (k)(9)(v); and

e. Revising paragraph (k)(10).

The revisions and additions read as follows:

§ 17.84 Special rules—vertebrates.

* * * * *

(k) * * *

(1) *Purpose of the rule.* The U.S. Fish and Wildlife Service (USFWS) finds that reestablishment of an experimental population of Mexican wolves into the subspecies' probable historical range will further the conservation and recovery of the Mexican wolf subspecies. The USFWS also finds that the experimental population is not essential under § 17.81(c)(2).

* * * * *

(7) * * *

(iv) * * *

(C) * * *

(1) Until the USFWS has achieved the genetic objective for the MWEPA set forth at paragraph (k)(9)(v) of this section by documenting that at least 22 released wolves have survived to breeding age in the MWEPA, the USFWS or a designated agency may issue permits only on a conditional, annual basis according to the following provisions: Either

(i) Annual release benchmarks (for the purposes of this paragraph, the term “benchmark” means the minimum cumulative number of released wolves surviving to breeding age since January 1, 2016, as documented annually in March) have been achieved based on the following schedule:

Year	Benchmark
2021	7
2022	9
2023	11
2024	13
2025	14
2026	15
2027	16
2028	18
2029	20
2030	22

; or

(ii) Permitted take on non-Federal land, or on Federal land under paragraph (k)(7)(v) of this section, during the previous year (April 1 to March 31) did not include the lethal take of any released wolf or wolves that were or would have counted toward the genetic objective set forth at paragraph (k)(9)(v) of this section.

(2) After the USFWS has achieved the genetic objective set forth at paragraph (k)(9)(v) of this section, the conditional annual basis for issuing permits will no longer be in effect.

(v) * * *

(A) * * *

(1) Until the USFWS has achieved the genetic objective for the MWEPA set forth at paragraph (k)(9)(v) of this section by documenting that at least 22 released wolves have survived to breeding age, the USFWS or a designated agency may issue permits only on a conditional, annual basis according to the following provisions: Either

(i) Annual release benchmarks (for the purposes of this paragraph, the term “benchmark” means the minimum cumulative number of released wolves surviving to breeding age since January 1, 2016, as documented annually in March) have been achieved based on the following schedule:

Year	Benchmark
2021	7
2022	9
2023	11
2024	13
2025	14
2026	15
2027	16
2028	18
2029	20
2030	22

; or

(ii) Permitted take on Federal land, or on non-Federal land under paragraph (k)(7)(iv) of this section, during the previous year (April 1 to March 31) did not include the lethal take of any released wolf or wolves that were or would have counted toward the genetic objective set forth at paragraph (k)(9)(v) of this section.

(2) After the USFWS has achieved the genetic objective set forth at paragraph (k)(9)(v) of this section, the conditional annual basis for issuing permits will no longer be in effect.

* * * * *

(vi) * * *

(E) No requests for take in response to unacceptable impacts to a wild ungulate herd may be made by the State game and fish agency or accepted by the USFWS until the genetic objective at paragraph (k)(9)(v) of this section has been met.

* * * * *

(9) * * *

(iii) Based on end-of-year counts, we will manage to achieve and sustain a population average greater than or equal to 320 wolves in Arizona and New Mexico. In order to achieve the current demographic recovery criteria for the United States, this average must be achieved over an 8-year period, the population must exceed 320 Mexican wolves each of the last 3 years of the 8-year period, and the annual population growth rate averaged over the 8-year period must be stable or increasing.

* * * * *

(v) The USFWS and designated agencies will conduct a sufficient number of releases into the MWEPA from captivity to result in at least 22 released Mexican wolves surviving to breeding age.

(10) *Evaluation.* The USFWS will continue to evaluate Mexican wolf reestablishment progress and prepare periodic progress reports and detailed annual reports. In addition, approximately 5 years after [EFFECTIVE DATE OF FINAL RULE], the USFWS will prepare a one-time overall evaluation of the experimental population program that focuses on

modifications needed to improve the efficacy of this rule and the progress the experimental population is making to the recovery of the Mexican wolf.

* * * * *

Martha Williams,
Principal Deputy Director,
Exercising the Delegated Authority of the Director,
U.S. Fish and Wildlife Service.