

# **Decision and Finding of No Significant Impact for the Environmental Assessment: Predator Damage Management in New Mexico**

## **United States Department of Agriculture, Animal and Plant Health Inspection Service Wildlife Services**

**December 2021**

### **1. Introduction**

Wildlife in New Mexico is an important part of the social fabric that comprises the human environment. Abundant wildlife populations interact with the 2.1 million citizens of the state every day. Wildlife can bring joy and happiness and improve the quality of life, but at other times can bring conflict, damage, and frustration. As human populations expand and more land is used for human needs, there is also increased potential for conflicting human/wildlife interactions. The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) responds to requests for assistance from individuals, organizations, and agencies experiencing damage caused by predators in New Mexico. In New Mexico, WS conducts its activities at the request of, and in cooperation with, other federal, state, tribal, and local agencies, as well as private organizations and individuals.

APHIS-WS in New Mexico (WS-New Mexico) prepared an Environmental Assessment (EA) evaluating the potential impacts of alternatives to WS-New Mexico's involvement in integrated predator damage management (PDM) activities in the state. We prepared the EA in consultation with the United States Forest Service (USFS), the United States Fish and Wildlife Service (USFWS), New Mexico Department of Agriculture (NMDA), and New Mexico Department of Game and Fish (NMDGF). We have also completed an Endangered Species Act consultation with the USFWS for activities proposed in this EA. This Decision document provides notification of WS-New Mexico's choice of a damage management alternative and the agency's determination regarding the environmental impacts of the chosen alternative for the Final December 2021 EA on PDM in New Mexico.

### **2. Purpose and Need**

The purpose of the proposed actions is to reduce conflicts involving predators that prey on or harass livestock and wildlife, damage other agricultural resources and property, impact wildlife species of management concern, or threaten health and safety in New Mexico. The predator species in New Mexico included in the analysis are listed in Table 1 below and EA Section 1.3. Details on the need for action to resolve these conflicts are provided in Section 1.11 of the EA.

**Table 1. Predator Species Included in the EA.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Managed By</b>
<b>Coyote</b>	<i>Canis latrans</i>	<b>NMDGF, NMDA</b>
<b>Black bear</b>	<i>Ursus americanus</i>	<b>NMDGF</b>
<b>Striped skunk</b>	<i>Mephitis mephitis</i>	<b>NMDGF</b>
<b>Raccoon</b>	<i>Procyon lotor</i>	<b>NMDGF</b>
<b>Cougar</b>	<i>Felis concolor</i>	<b>NMDGF</b>
<b>Red fox</b>	<i>Vulpes vulpes</i>	<b>NMDGF</b>
<b>Bobcat</b>	<i>Lynx rufus</i>	<b>NMDGF</b>
<b>Badger</b>	<i>Taxidea taxus</i>	<b>NMDGF</b>
<b>Virginia Opossum</b>	<i>Didelphis virginianus</i>	<b>NMDGF</b>
<b>Gray Fox</b>	<i>Urocyon cinereoargenteus</i>	<b>NMDGF</b>
<b>Free-ranging/feral dog</b>	<i>Canis familiaris</i>	<b>Local Officials</b>
<b>Western Spotted Skunk</b>	<i>Spilogale gracilis</i>	<b>NMDGF</b>
<b>Free-Ranging/Feral cat</b>	<i>Felis domesticus</i>	<b>Local Officials</b>
<b>Kit fox</b>	<i>Vulpes macrotis</i>	<b>NMDGF</b>
<b>Hog-nosed skunk</b>	<i>Conepatus leuconotus</i>	<b>NMDGF</b>
<b>Swift fox</b>	<i>Vulpes velox</i>	<b>NMDGF</b>

### 3. Public Involvement

On July 28, 2021, WS-New Mexico solicited public comments on the alternatives and issues addressed in the Pre-decisional Draft of the July 2021 EA for PDM in New Mexico. WS-New Mexico posted notices of the invitation to comment in the APHIS Stakeholder Registry and in the federal e-rulemaking portal (Regulations.gov). WS-New Mexico published a Legal Notice in the Albuquerque Journal from August 5, 2021 to August 7, 2021 and The Santa Fe New Mexican from August 6, 2021 to August 8, 2021. The comment period closed on September 10, 2021. WS-New Mexico received 159 submissions in response to the request for public comments, and responded to the substantive public comments in Chapter 5 of the EA. This Decision and Finding of No Significant Impact (FONSI), and the Final EA, will be made available to the public using the same methods as for the Pre-decisional EA and in accordance with 7 C.F.R. § 372.8(b)(3).

### 4. Tribal Involvement

In May 2021, WS-New Mexico emailed copies of the Agency Pre-decisional Draft EA to all federally recognized tribes in New Mexico. In the email sending the Agency Pre-decisional Draft EA, we asked tribal contacts to review the sections that pertain to their policies and management plans, and asked them to provide comments on how to improve, modify, or clarify the information in the Agency Pre-decisional Draft EA. None of the tribes submitted comments on the Agency Pre-Decisional Draft EA.

## 5. Related Analyses

Prior to the completion of the Final 2021 EA on PDM in New Mexico and the Decision and FONSI herein, WS-New Mexico conducted its PDM actions pursuant to a 2006 WS-New Mexico PDM EA Decision and FONSI. This Decision and FONSI, and the Final 2021 EA on PDM in New Mexico, will replace the 2006 PDM EA Decision and FONSI.

## 6. Affected Environment

The EA analyzes the potential impacts of WS-New Mexico's PDM activities, conducted at the request of, and in cooperation with, NMDGF, NMDA, tribes, and other land management agencies or agencies with regulatory authority over the wildlife at issue on all public, private, and tribal lands in New Mexico under established Memoranda of Understanding, Cooperative Agreements or Cooperative Service Agreements, or Work Initiation Documents. Although the range and habitat used by individual species varies, some predators discussed in the EA can occur in any location in the state where suitable habitat exists for foraging and shelter. Consequently, damage or threats of damage caused by the species addressed in the EA could occur statewide, wherever those species occur. WS-New Mexico conducts PDM only when requested by a landowner, affected resource owner or manager, land manager, agency with regulatory authority over the wildlife at issue, or tribe. WS-New Mexico will coordinate actions on public lands with the appropriate land management agency and will adhere to applicable land and resource management plans, regulations, and policies as required in WS Directive 2.210 Compliance with Federal, State, and Local Laws and Regulations. Chapters 1, 2, and 3 of the EA provide a detailed discussion of the Affected Environment. Appendix A of the EA describes PDM methods implemented by WS-New Mexico under the proposed action.

New Mexico encompasses 121,598 mi<sup>2</sup> in 33 Counties and consists of 43% private lands, 17% BLM, 12% USFS, 12% State, 9% Tribal, and 7% other lands. The majority of property under agreement for PDM is privately owned (47%), followed by BLM (22%), State (11%), County/City (10%), USFS (9%), and other lands (1%). Less than 1% of WS-New Mexico's responses to PDM conflicts occur on tribal lands (EA Section 1.11.2.8 and 1.8.5).

## 7. Issues

We identified the following issues during the development of the EA and used them to drive the environmental analysis and compare the potential impacts of the alternatives.

1. Impacts on Target Species – What might be the direct, indirect, and cumulative impacts of removing predators on target predator populations?
2. Impacts on Threatened and Endangered (T&E) Species and Other Nontarget Species – What might be the direct, indirect, and cumulative impacts on Non-Target species, including T&E species?
3. Potential for WS-New Mexico PDM Activities to Contribute to or Cause Ecological Trophic Cascades – How would the alternatives impact trophic cascades, biodiversity, and ecosystem resilience? Do the proposed PDM activities cause trophic cascades, loss of biodiversity, declines in habitat quality due to unbalanced ungulate populations, or broad wildlife population changes which impact the ecosystem?

4. Humaneness and Ethics of WS-New Mexico PDM Methods – What are ethics and attitudes about wildlife damage management? How are euthanasia and humane killing defined? How are pain and suffering evaluated? What factors influence humaneness of trapping? What is APHIS-WS’ approach to humaneness?
5. Impacts of PDM Methods on the Environment and Their Risk(s) to Human/Pet Health and Safety – What are the potential risks and benefits of PDM methods to human and pet health and safety and the environment?
6. Impacts on Special Management Areas (SMAs) – What are the potential risks and benefits of PDM methods on SMAs?

We considered 14 additional issues in the EA, but we did not analyze them in detail, as explained in Section 3.3 of the EA. WS-New Mexico’s responses to additional issues raised during the comment period for the EA are addressed in the Responses to Comments in Chapter 5 of the EA. Clarifications to the analysis were incorporated into the text, as outlined in Section 11 of this Decision.

## 8. Alternatives Analyzed in Detail

Chapter 3 of the Final EA considered and analyzed 5 alternatives to address the 6 primary issues identified. We considered, but did not analyze, 25 additional alternatives (EA Section 2.5). The following is a summary of the alternatives considered in detail in the EA. Section 2.3 of the EA summarizes each alternative and Chapter 3 provides analysis and comparison of the potential effects of each alternative.

### **Alternative 1: Proposed Action/No Action Alternative: Continue WS-New Mexico Predator Damage Management Activities.**

This is the “No Action” Alternative, as defined by the Council on Environmental Quality for ongoing actions. Under this alternative, WS-New Mexico uses a comprehensive range of legally available lethal and non-lethal methods in its PDM activities. All methods are detailed in Appendix A to the EA, and WS-New Mexico applies them in accordance with applicable federal, state, and local laws and APHIS-WS Directives. Preference is given to non-lethal methods when practical and effective.

WS-New Mexico personnel implement or recommend effective non-lethal and/or lethal PDM activities as early as possible in order to increase the likelihood of those methods achieving the appropriate level of damage reduction.

Under this alternative, WS-New Mexico will continue to respond to requests for assistance by:

- Taking no action, if warranted;
- Providing non-lethal and/or lethal PDM technical assistance to property owners or land managers on actions they could take to reduce damage caused by predators; or
- Providing non-lethal and lethal operational PDM assistance.

WS-New Mexico would also continue to work with the National Wildlife Research Center (NWRC) and other professional entities to produce and distribute materials and provide

educational programs on methods for preventing or reducing predator damage and other research assistance.

Under this alternative, methods used or recommended by WS-New Mexico could include habitat management, husbandry, hazing, fencing, turbo fladry, aversive/harassment devices, herding, livestock guard animals, ground shooting, aerial shooting, snares, denning, M-44s, and various trap devices (EA Appendix A). WS-New Mexico will conduct work on federally- managed public lands in accordance with relevant MOUs (Section 1.8). WS-New Mexico will coordinate actions on public lands and private lands with the appropriate land management agency or landowner/land manager and will adhere to applicable land and resource management plans, regulations, and policies as required in WS Directive 2.210 Compliance with Federal, State, and Local Laws and Regulations including Senate Bill 32 (EA 2.4.4.7).

Alternative 1 is the baseline against which all other alternatives are compared, as explained in Section 3.1 of the EA.

**Alternative 2: WS-New Mexico provides lethal and non-lethal technical assistance and only non-lethal preventive and corrective operational assistance.**

WS-New Mexico would provide technical assistance, providing both non-lethal and lethal recommendations, advice, and information, for others to implement the methods themselves, and would provide assistance to implement non-lethal PDM activities. However, WS-New Mexico would only operationally engage in non-lethal PDM activities.

Alternative 2 is similar to Alternative 1 (No Action), except that WS-New Mexico would not be available to provide any lethal operational PDM assistance to any requester, even if requested as an agent of NMDGF, NMDA, or the USFWS. Requesters may conduct lethal PDM activities on their own, but would be dependent on commercial companies, NMDGF, NMDA, USFWS, or volunteers/family/friends when they require assistance with lethal PDM activities.

In some cases, WS-New Mexico may provide supplies or materials to requesters for implementation of non-lethal methods that are of limited availability for use by private entities, such as loaning high-powered flashlights and predator calls. Generally, under this alternative, WS-New Mexico could recommend several non-lethal management strategies (Appendix A) to the requester for short-term and long-term solutions to managing damage, as well as recommend and provide training on lethal techniques. Those persons receiving technical assistance from WS-New Mexico could implement recommended methods, use other lethal and non-lethal methods not recommended by WS-New Mexico, seek assistance from other entities, or take no further action. While WS-New Mexico could recommend non-lethal and lethal methods, WS-New Mexico would only loan equipment or implement those non-lethal methods legally available for use by the requester and advise them of any permits needed.

This alternative reallocates the immediate responsibility of operational damage management work and environmental compliance responsibilities to the resource owner, other governmental agencies, and/or private businesses. Sections 2.3.1.10 and 3.4.1 of the EA discuss what other entities may be available to conduct PDM in cases where WS-New Mexico cannot respond to requests for assistance. Private individuals or companies are not obligated to conduct NEPA analyses, engage in consultations under the ESA, or engage in formal monitoring.

**Alternative 3: WS-New Mexico provides non-lethal PDM assistance before lethal assistance.**

Under this alternative, WS-New Mexico would provide both non-lethal and lethal technical assistance and operational assistance. However, application of reasonable non-lethal methods would have to be shown ineffective to resolve the damage or threat before WS-New Mexico could utilize lethal PDM methods. WS-New Mexico would not provide preventive lethal PDM assistance, and lethal PDM assistance could not be implemented until WS-New Mexico confirmed and recorded that reasonable non-lethal actions have not resolved the problem.

WS-New Mexico would continue to use non-lethal and lethal technical assistance. Under Alternative 3, WS-New Mexico must implement non-lethal methods prior to implementing lethal methods

**Alternative 4: WS-New Mexico provides lethal PDM only for human/pet safety or to protect ESA listed species.**

Under this alternative, WS-New Mexico would provide full PDM technical assistance, including providing recommendations and guidance to the requester on implementation of lethal and non-lethal PDM methods, and provide non-lethal operational PDM, but would only provide lethal operational PDM assistance for protecting human/pet health or safety or to protect ESA-listed species. For instances of human/pet health or safety or to protect ESA-listed species, all lethal and non-lethal PDM methods described in Appendix A of the EA are available for recommendation and/or use. WS-New Mexico would respond to all other requests for PDM assistance with non-lethal operational methods and lethal and non-lethal technical assistance.

**Alternative 5: No WS-New Mexico involvement in PDM activities.**

Under Alternative 5, WS-New Mexico would not be involved in any PDM efforts in New Mexico. PDM would still be implemented by other legally authorized entities, such as NMDGF, NMDA, property owners, commercial PDM companies, NMDGF-authorized pilots, and NMDGF volunteers (Sections 1.7 and 2.3.1). Entities experiencing damage caused by predators could continue to conduct PDM on their own despite the lack of involvement by WS-New Mexico.

Currently, NMDGF provides direct wildlife damage management assistance for protected game and furbearer species and provides technical assistance and issues depredation permits for such activities. Requests for PDM information directed to WS-New Mexico would be redirected to NMDGF.

Requesters would need to seek information on existing and new PDM methods (including methods developed and tested by the APHIS-WS NWRC) from sources such as NMDGF, NMDA, University of New Mexico Extension Service offices, conservation districts, or pest control companies. Also, private individuals and companies are not obligated to conduct any NEPA analyses, engage in consultations under the ESA, or conduct formal monitoring.

**9. Monitoring**

Under Alternative 1, WS-New Mexico will monitor PDM activities annually to determine whether the analyses and determinations in the EA adequately address current and anticipated future

activities, and to determine whether new information warrants supplementing or replacing the EA. Under Alternative 1, WS-New Mexico will provide data to all applicable natural resource management agencies including (NMDGF, NMDA, USFWS, BLM, and USFS) on the take of target and non-target animals. The data will help monitor the impacts on wildlife populations.

## **10. New Information**

We are not aware of any significant new information that has become available since the EA was made available to the public. Studies and publications provided to us have been reviewed, and relevant publications were incorporated into the final EA, where applicable. Sources provided and incorporated into the Final EA are listed in Chapter 5 of the EA.

## **11. Clarifications and Additions to the Pre-Decisional Draft EA**

WS-New Mexico has made general edits to the Pre-Decisional Draft EA and some clarifications in response to public comments and review of available information. These clarifications are consistent with the analyses, conclusions, and material presented in the Pre-Decisional Draft EA and more fully describe potential effects of WS-New Mexico's PDM activities under the alternatives. Key clarifications and additions are:

- Section 2.5.10 – Added more detailed information on WS-New Mexico's stance on the use of lead ammunition for PDM.
- Added Chapter 5 (Responses to Public Comments and Documents Received during the Public Comment Period).
- General formatting and grammatical edits.

## **12. Use of the Best Available Science**

In order to conduct efficient and effective PDM and stay aware of new information, WS-New Mexico used the best available data and information from wildlife agencies having jurisdiction by law (e.g., NMDGF and USFWS), as well as scientific literature, especially peer-reviewed scientific literature, to inform its decision-making. The EA uses the best available information from those sources to provide estimates of wildlife population size and status, assess risks to human safety, discuss PDM strategies and tools, and discuss ecological impacts.

## **13. Review of Alternatives**

The EA contains a detailed analysis of the alternatives based on the issues identified in Section 3.2. Table 2, below, summarizes those analyses, with a brief narrative summarizing key facts and findings. Chapter 3 of the EA details all of the topics discussed below.

Our analysis showed that none of the alternatives would have a significant impact on the human environment. After reviewing the EA and carefully evaluating all alternatives, WS-New Mexico has determined that Alternative 1 offers the greatest opportunity to meet our purpose and need for action within current regulatory constraints. Alternative 1 enables development of effective site-specific PDM strategies that accommodate resource owner/manager objectives and minimize the risk of adverse impacts on the human environment.

The restrictions on WS-New Mexico's ability to use any strategy or combination of methods to alleviate human-predator conflicts under Alternatives 2, 3, 4, and 5 could result in less effective and less environmentally responsible resolution of PDM issues, as described in Sections 3.5.17, 3.6.5.2-5, 3.7.2-5, 3.8.4.2-5, 3.9.6.2-5 of the EA, and throughout Section 3.10 and 3.11 of the EA. Non-WS entities may provide PDM services (EA Sections 2.3.1.10 and 3.4.1), but there is large variability in the quality of the services and accountability to the public. Should WS-New Mexico be unable to provide PDM, some level of PDM would likely be available to those experiencing damage, and WS-New Mexico has analyzed the effects of reasonably foreseeable non-WS participation. Section 3.4.2 of the EA discussed and compared how other entities may meet the need for PDM when WS-New Mexico assistance is limited or absent.

### **Impacts on Target Species (EA Section 3.5)**

The EA indicates that WS-New Mexico's use of non-lethal and lethal methods would not have significant impacts on target species populations under any of the alternatives analyzed. For all species included within the scope of the EA, the annual statewide known cumulative take is below the annual maximum sustainable harvest level. Moreover, WS-New Mexico based its analysis of impacts on target species on conservative estimates of population size, which results in an overestimation of impacts of the proposed actions<sup>1</sup>. WS-New Mexico's lethal take of target species would be highest under Alternative 1, followed by Alternative 3. Alternative 3 would result in more lethal take by WS-New Mexico than Alternatives 2 and 4. Under Alternative 2, WS-New Mexico would only use non-lethal methods operationally, and under Alternative 5, WS-New Mexico would not conduct any PDM, resulting in no lethal take by WS-New Mexico. While Alternative 1 has the highest anticipated level of lethal take by WS-New Mexico, none of the proposed take levels reach the maximum sustainable harvest level or will significantly impact target species populations.

We anticipate that cumulative target take by WS-New Mexico and non-WS entities will be similar across all alternatives. Under Alternative 1, WS-New Mexico provides non-lethal assistance where it is appropriate and may use lethal methods when non-lethal options are determined to be inappropriate or are unsuccessful. Under Alternatives 2 and 4 where use of lethal methods is restricted, we anticipate that cumulative lethal take will remain similar to Alternative 1 because WS-New Mexico will continue to help people resolve problems using non-lethal methods, and individuals and entities will likely still need to seek lethal remedies if non-lethal efforts are unsuccessful. The difference between Alternative 1 and Alternatives 2-5 is primarily *who* provides the lethal damage management. Private wildlife control operators, and NMDGF can provide lethal PDM if WS-New Mexico cannot provide it, but non-WS entities and individuals may have differing levels of skill and training in doing so. Under all alternatives, we expect that non-WS entities will

---

<sup>1</sup> In order to further ensure the most conservative estimates for impacts on target take, WS-New Mexico presented the lowest maximum sustainable harvest level available from peer-reviewed literature in the EA for each target predator analyzed. WS- New Mexico's take, as well as cumulative take, for each species are compared against this number in Section 3.5 of the EA. For species where there was not a published maximum sustainable harvest level, WS-New Mexico used other metrics [such as? Can you put in a few examples?] to determine effects on the populations.



provide PDM assistance if WS-New Mexico is unavailable (EA Sections 2.3.1.10 and 3.4.1); however, other entities are not required to report all take to NMDGF or conduct NEPA analyses and ESA consultations on their actions. Additionally, it is possible that more animals could be taken by non-WS entities and individuals as a result of their use of less selective methods and from being less proficient in their removal efforts, which may increase impacts. Table 3.16 (EA Section 3.5.17.1) provides a conservative projection of cumulative lethal take by all entities for species included in the EA, based on information reported to NMDGF.

### **Impacts on T&E Species (EA Section 3.6)**

We have concluded that none of the five alternatives would have a significant impact on T&E species. covering the analyzed impacts WS-New Mexico consulted with USFWS concerning potential impacts of WDM methods on T&E species and completed a Biological Assessment (BA) in a programmatic informal consultation on August 15, 2014. The activities analyzed in the EA were determined to have no significant impact on T&E species. WS-New Mexico received a letter of concurrence from the USFWS on December 16, 2014. This consultation and the protective measures associated with them apply to WS-New Mexico PDM activities under Alternatives 1-4 (Alternative 5 is no WS-New Mexico PDM activities). Impacts on all state- and federally-listed T&E species in New Mexico from WS-New Mexico's PDM activities under Alternative 1 are negligible. Non-federal entities are not required to conduct ESA consultations on their actions, nor are they bound by these protective measures, and their activities may have a greater impact on state-listed threatened or endangered species or ESA-listed species. Therefore, Alternatives 2-5 present a greater risk to both state-listed and ESA-listed threatened and endangered species than Alternative 1 because increased levels of PDM are likely to be conducted by non-WS entities and individuals under those alternatives. Risks to T&E species are greatest under Alternative 5 because, in addition to increased potential for unintentional take, non-WS entities or individuals may not be able to conduct lethal PDM activities to protect T&E species from predation unless authorized by USFWS.

### **Impacts on Other Non-Target Species (EA Section 3.7)**

We have concluded that none of the five alternatives would have a significant impact on non-target species. However, under alternatives where WS-New Mexico does not provide the full range of PDM assistance to all requesters (Alternatives 2-5), non-WS entities and individuals may conduct PDM, but they likely do not have the same skill levels, equipment, experience, and/or obligations under NEPA. Under these alternatives, there is likely to be slightly greater or unreported impacts to non-target species (EA Sections 3.7.1.2, 3.7.1.3, 3.7.1.4, and 3.7.1.5).

WS-New Mexico employees are highly skilled in applying PDM methods in the most selective manner resulting in very limited non-target take. Between Fiscal Years (FY) 2015 and 2019, WS-New Mexico's total unintentional take was just 1.23% of the total PDM lethal take. More specifically, during this time period, WS-New Mexico unintentionally took an average of 77.4 animals, with an additional 38.4 animals captured and freed (Table 3.18). A large proportion of the animals that WS-New Mexico unintentionally lethally took were gray fox, badgers, kit fox, and swift fox, which are abundant in New Mexico and are also analyzed as target species in this EA. Estimated cumulative take for each these species is provided in section 3.5 of the EA. This level of unintentional take is a small fraction of the total cumulative take for these species in New Mexico (EA Section 3.5). WS-New Mexico expects to continue to have a similar negligible level of

unintentional take under Alternative 1.

WCOs and landowners are often legally authorized to conduct their own lethal PDM activities (EA Sections 2.3.1.10 and 3.4.1). NMDGF has trained biologists capable of responding to incidents in which private individuals and WCOs may not be authorized to or trained to respond. However, landowners generally do not have the training or skills necessary to safely and efficiently use a wide range of PDM methods. Although it is impossible to anticipate exactly how many additional non-target animals, if any, would be taken by non-WS entities and individuals under Alternatives 2-4, we assume that non-target take still would remain low under these alternatives relative to the populations of the non-target species taken and cumulative take would remain below the current annual maximum sustainable harvest level (Section 3.7). Therefore, we conclude that the impacts to populations of non-target species under Alternatives 2-5 could exceed those of Alternative 1, but still would not be significant.

### **What is the Potential for WS-New Mexico PDM Activities to Contribute to or Cause Ecological Trophic Cascades (EA Section 3.8)**

WS-New Mexico's mission is to reduce damage or threats caused by predators, when requested, and in compliance with applicable local, state, and federal laws. Strategies for resolving damage focus on removing the offending animal or group of animals and do not include significant reductions of nativespecies' populations. WS-New Mexico does not seek to eliminate native predator populations from any area on a long-term basis, and eradication is not a purpose and need of this EA. The analysis in the EA indicates that none of the alternatives would result in significant adverse effects to predator populations. No species would be extirpated, and none would be introduced into an ecosystem. As discussed in detail in Section 3.8 of the EA, impacts on predator populations are generally temporary, affecting only small or isolated geographic areas for short periods of time. The EA has not identified any adverse effects to statewide predator distribution. Under all alternatives, we expect that non-WS entities and individuals will provide PDM assistance if WS-New Mexico is unavailable (EA Sections 2.3.1.10 and 3.4.1); however, impacts from other non-WS entities and individuals are not expected to be significant. We have determined that neither WS-New Mexico's proposed action under Alternative 1, nor any of the other alternatives, is of sufficient magnitude or scope to result in ecosystem-level shifts or trophic cascades. Additionally, it is highly unlikely that cumulative take under any of the alternatives will contribute to any ecologically forced trophic cascades, mesopredator releases, and any resulting adverse ecological effects on biodiversity, ecosystem resilience, or ecosystem services. The EA discusses trophic cascades extensively in Section 3.8, and Appendix E, and addresses public comments specific to this issue in Chapter 5.

### **Humaneness and Ethics of WS-New Mexico PDM Methods (EA Section 3.9)**

The EA discussed perspectives on humaneness and ethics related to PDM, and it evaluated each PDM method for humaneness and selectivity. Although ethical perspectives and perceptions of humaneness vary depending upon individual values and experiences, the EA considered the available science and professional guidance (e.g., Association of Fish and Wildlife Agencies) on the subject. In Section 3.9.6 of the EA, WS-New Mexico evaluated PDM methods for humaneness, specifically evaluating the humaneness of PDM conducted under each alternative by any entity. The analysis in Section 3.9.6 of the EA determined that Alternative 1 is likely to be the most humane/ethical, with Alternatives 2-5 being less humane/ethical, corresponding to the amount of PDM that would likely be conducted under each alternative by less skilled, non-WS personnel. We based this determination largely on the

professional skills and commitment of APHIS-WS to humaneness (WS Directive 1.301) that are less likely to be consistently replicated by non-WS entities and individuals.

### **Impacts of PDM Methods on the Environment and Their Risk to Human/Pet Health and Safety (EA Section 3.10).**

We have determined that none of the alternatives would have a significant impact on the environment (soil, water, and terrestrial and aquatic species) or human and pet health or safety. Alternatives that limit WS-New Mexico's involvement in PDM (Alternatives 2-5) may result in increased PDM by less skilled non-WS entities and individuals, which could result in increased adverse effects compared to Alternative 1, the Proposed Alternative.

With respect to WS-New Mexico's proposed actions, we determined that WS-New Mexico's proposed actions would not have a significant impact on the environment or human and pet health or safety under any of the alternatives. The EA analyzed the potential effects of PDM methods on the environment and human and pet health or safety by dividing the methods into 3 categories: (1) mechanical/physical capture devices, (2) lead ammunition, and (3) chemical methods. Under each category, we found the PDM methods to have low impact on environmental resources and human and pet health or safety under all of the alternatives.

WS-New Mexico adheres to a variety of protective measures, which further reduces risks to humans and pets and the environment from use of PDM methods, as described in EA Section 2.4. All PDM methods proposed are available to non-WS entities and individuals in some capacity (EA Section 2.3.1.9), but those non-WS entities and individuals may not adhere to the same protective measures. Therefore, risks may be slightly higher for alternatives that increase the amount of PDM that may occur by non-WS entities and individuals.

### **Impacts on Special Management Areas (SMAs) (EA Section 3.11)**

None of the alternatives have a significant impact on SMAs. Risks and potential impacts to SMAs from WS-New Mexico's actions are low or negligible for all the alternatives. Risks associated with PDM conducted by non-WS entities and individuals would vary depending on the skill level and equipment available to individuals conducting PDM. However, under Alternatives 2-5, non-WS entities and individuals conducting lethal PDM activities in lieu of WS-New Mexico do not have the same obligations under NEPA or the ESA. Non-WS entities and individuals also do not have the same experience or system of coordinating with affected public land management agencies. Lack of coordination increases potential risks of adverse impacts on SMAs. As a result, overall impacts on SMAs may be slightly higher for alternatives that increase the amount of PDM that could occur by non-WS entities and individuals (Alternatives 2-5).

**Table 2. Environmental Issues and Needs for Action Compared for Each Alternative**

<u>Alternative 1</u> <b>Proposed Action/No Action-Continue WS-New Mexico PDM Assistance</b>	<u>Alternative 2</u> <b>Technical PDM Assistance and Non-lethal Operational Assistance</b>	<u>Alternative 3</u> <b>Non-lethal PDM Assistance before Recommending or Applying Lethal PDM Assistance</b>	<u>Alternative 4</u> <b>Lethal PDM Assistance Only for Human/Pet Safety or to Protect T&amp;E Species</b>	<u>Alternative 5</u> <b>No WS-New Mexico PDM Activities</b>
<b>Impacts on Target Species</b>				
<p><b>Current and projected direct and cumulative take are well below maximum sustainable harvest levels as determined by a review of the available scientific literature. All predator species populations are stable as determined by NMDGF. WS-New Mexico is not, and would not, adversely impact any native predator populations.</b></p>	<p>WS-New Mexico would have no impact on predator species populations. Other entities would be expected to fill the need for lethal operational assistance to some degree and have a level of take similar to the cumulative take under Alternative 1. Take by other sources would not be expected to near the maximum sustainable harvest levels. Predator populations are expected to be stable.</p>	<p>WS-New Mexico would have slightly less impact on predator species populations compared to Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some degree, if they determine that lethal PDM is immediately necessary. Cumulative levels of take would be expected to be similar to Alternative 1 and would not be expected to near the maximum sustainable harvest levels. Predator populations are expected to be stable.</p>	<p>WS-New Mexico would have less impact on predator species populations compared to Alternatives 1 and 3. Other entities would be expected to fill the need for lethal PDM to protect other resources to some degree and have a level of take similar to the cumulative take under Alternative 1. Cumulative take would not be expected to near the maximum sustainable harvest levels. Predator populations are expected to be stable.</p>	<p>WS-New Mexico would have no impact on predator species populations. Other entities would be expected to fill the need for lethal operational assistance to some degree. Without WS-New Mexico involvement, other entities may be less efficient and effective, and therefore effects on predator species populations would likely be higher than under Alternatives 1-4. Predator populations are expected to be stable.</p>
<b>Impacts on T&amp;E species</b>				
<p><b>WS-New Mexico has completed appropriate ESA consultation with USFWS to avoid jeopardy to T&amp;E species including the Mexican wolf. WS-New Mexico is not likely to</b></p>	<p>WS-New Mexico would have less impact on T&amp;E species compared to Alternative 1. T&amp;E species would not benefit from lethal PDM conducted by WS-New Mexico for T&amp;E species</p>	<p>WS-New Mexico would have slightly less impact on T&amp;E species compared to Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some</p>	<p>WS-New Mexico would have less impact on T&amp;E species compared to Alternatives 1 and 3. Other entities would be expected to fill the need for lethal operational assistance to some</p>	<p>WS-New Mexico would have no impact on T&amp;E species. T&amp;E species would not benefit from PDM conducted by WS-New Mexico for T&amp;E species protection. Other entities would be expected to fill the</p>

<p><b>adversely affect any other T&amp;E species or would have no effect. Effects are expected to continue to be minimal. WS-New Mexico would continue to conduct PDM to protect T&amp;E species.</b></p>	<p>protection. Other entities would be expected to fill the need for lethal operational assistance to some degree, potentially resulting in higher risks to T&amp;E species than under Alternative 1.</p>	<p>degree if lethal PDM is deemed immediately necessary, potentially resulting in higher risks to T&amp;E species than under Alternative 1.</p>	<p>degree, potentially resulting in higher risks to T&amp;E species, than under Alternative 1. WS-New Mexico would continue to conduct PDM to protect T&amp;E species.</p>	<p>need for lethal operational assistance to some degree, potentially resulting in higher risks to T&amp;E species. Without WS-New Mexico involvement, other entities may be less efficient and effective, and therefore adverse effects on T&amp;E species would be expected to be higher than under Alternatives 1-4.</p>
---	---	---	--	---

**Impacts on Nontarget Species**

<p><b>WS-New Mexico lethally takes very few individual animals unintentionally during its PDM activities and its activities are highly selective for specific predator species. WS-New Mexico's unintentional take is expected to remain negligible.</b></p>	<p>WS-New Mexico would likely take fewer individual animals unintentionally compared to Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some degree and potentially have a higher level of unintentional take compared to Alternative 1.</p>	<p>WS-New Mexico would likely take slightly fewer individual animals unintentionally compared to Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some degree, if they determine that lethal PDM is immediately necessary, potentially resulting in higher unintentional take compared to Alternative 1.</p>	<p>WS-New Mexico would likely take fewer individual animals unintentionally compared to Alternatives 1 and 3. Other entities would be expected to fill the need for lethal operational assistance to some degree and potentially have a higher level of unintentional take compared to Alternative 1.</p>	<p>WS-New Mexico would have no unintentional take of individual animals. Other entities would be expected to fill the need for lethal operational assistance to some degree, potentially resulting in higher unintentional take. Without WS-New Mexico involvement, other entities may be less efficient and effective, and therefore effects on species taken unintentionally would be expected to be higher than under Alternatives 1-4.</p>
--	--	---	---	--

**Potential for WS-New Mexico PDM Activities to Contribute to or Cause Ecological Trophic Cascades**

<p><b>The effects of WS-New Mexico PDM activities on predator species populations are temporary, localized, and of low magnitude. It is highly unlikely that WS-New</b></p>	<p>WS-New Mexico would have no take. Other entities would be expected to fill the need for lethal operational assistance to some degree and potentially have a higher level of take</p>	<p>WS-New Mexico would have slightly less take compared to Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some degree, if they</p>	<p>WS-New Mexico would have less take compared to Alternatives 1 and 3. Other entities would be expected to fill the need for lethal operational assistance to some degree and</p>	<p>WS-New Mexico would have no take. Other entities would be expected to fill the need for lethal operational assistance to some degree, potentially resulting in a higher level of take. Without WS-</p>
---	---	---	--	---

<p><b>Mexico’s current and projected direct and cumulative take will contribute to any trophic cascades.</b></p>	<p>compared to Alternative 1. However, it is highly unlikely that cumulative take by other entities will contribute to any trophic cascades.</p>	<p>determine that lethal PDM is immediately necessary. Cumulative levels of take would be expected to be similar to Alternative 1. It is highly unlikely that cumulative take will contribute to any trophic cascades.</p>	<p>potentially have a higher level of take compared to Alternative 1. It is highly unlikely that cumulative take will contribute to any trophic cascades.</p>	<p>New Mexico involvement, other entities may be less efficient and effective, and therefore take would be expected to be higher than under Alternatives 1-4. However, it is highly unlikely that cumulative take by other entities will contribute to any trophic cascades.</p>
--	--	--	---	--

**Humaneness and Ethics of WS-New Mexico PDM Methods**

<p><b>WS-New Mexico follows APHIS-WS training, Directives, and ethics policies. WS-New Mexico also follows state laws and regulations and utilizes BMPs, expertise, and highly selective methods to uphold high standards of humaneness and ethics.</b></p>	<p>WS-New Mexico would continue to uphold the same standards under Alternative 1. In addition, some people may feel it is unethical and inhumane not to take lethal measures to protect domestic animals from predation, if necessary. Other entities would be expected to fill the need for lethal operational PDM to some degree. However, technical assistance would not compensate for private entities’ lack of experience in lethal PDM, likely resulting in less humane and ethical practices compared to Alternative 1.</p>	<p>WS-New Mexico would continue to uphold standards under Alternative 1. However, in cases where lethal PDM is deemed immediately necessary, it may be less humane and ethical to delay immediate lethal action. Other entities would be expected to fill the need for lethal operational assistance to some degree, if they determine that lethal PDM is immediately necessary, potentially resulting in less humane and ethical practices compared to Alternative 1.</p>	<p>WS-New Mexico would continue to uphold standards under Alternative 1. In addition, some people may feel it is unethical and inhumane not to take lethal measures to protect domestic livestock from predation, if necessary. Other entities would be expected to fill the need for lethal operational PDM to some degree. However, technical assistance would not compensate for private entities’ lack of experience in lethal PDM, likely resulting in less humane and ethical practices compared to Alternative 1.</p>	<p>WS-New Mexico would have no effect on humaneness and ethics. Other entities would be expected to fill the need for lethal operational assistance to some degree, potentially resulting in less humane and ethical practices. Without WS-New Mexico involvement, other entities may be less humane and ethical compared to Alternatives 1-4.</p>
---	---	--	--	--

**Impacts of PDM Methods on the Environment and their Risk to Human/Pet Health and Safety: Physical Capture Methods.**

<p><b>The analysis of impacts on soil, water, and terrestrial and aquatic species indicates there</b></p>	<p>WS-New Mexico’s impact on the environment, humans, and domestic animals would be less than</p>	<p>WS-New Mexico’s impact on the environment, humans, and domestic animals would be similar to</p>	<p>WS-New Mexico’s impact on the environment, humans, and domestic animals would be less than</p>	<p>WS-New Mexico would have no impact on the environment, humans, and domestic animals. Other entities would be</p>
---	---	--	---	---

<p><b>would be little to no effect on the environment from WS-New Mexico's use of mechanical/physical methods. Risks to humans and domestic animals from WS-New Mexico's use of mechanical/physical methods are very low on private lands and highly unlikely on public lands due to short duration and protective measures.</b></p>	<p>Alternative 1. Other entities would be expected to fill the need for lethal operational PDM to some degree, potentially resulting in greater risks to the environment, humans, and domestic animals compared to Alternative 1.</p>	<p>Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some degree, if they determine that lethal PDM is immediately necessary, potentially resulting in greater risks to the environment, humans, and domestic animals compared to Alternative 1.</p>	<p>Alternatives 1 and 3. Other entities would be expected to fill the need for lethal operational PDM to some degree, potentially resulting in greater risks to the environment, humans, and domestic animals compared to Alternative 1.</p>	<p>expected to fill the need for lethal operational assistance to some degree, potentially resulting in greater risks to the environment, humans, and domestic animals. Without WS-New Mexico involvement, effects on the environment, humans, and domestic animals would be expected to be higher than under Alternatives 1-4.</p>
--	---	--	--	---

**Impacts of PDM Methods on the Environment and their Risk to Human/Pet Health and Safety: Lead Ammunition**

<p><b>Impacts of lead on soils, water, plants, aquatic species, and invertebrates from WS-New Mexico sources of lead is negligible. Impacts of lead on birds and terrestrial mammals from WS-New Mexico sources are low. Risks to humans and domestic animals from WS-New Mexico sources of lead are very low.</b></p>	<p>WS-New Mexico's use of lead would have no impact on the environment, humans, and domestic animals. Other entities would be expected to fill the need for lethal operational PDM to some degree, potentially resulting in greater risks to the environment, humans, and domestic animals compared to Alternative 1.</p>	<p>WS-New Mexico's impact on the environment, humans, and domestic animals would be slightly less than Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some degree, if they determine that lethal PDM is immediately necessary, potentially resulting in greater risks to the environment, humans, and domestic animals compared to Alternative 1.</p>	<p>WS-New Mexico's impact on the environment, humans, and domestic animals would be less than Alternatives 1 and 3. Other entities would be expected to fill the need for lethal operational PDM to some degree, potentially resulting in greater risks to the environment, humans, and domestic animals compared to Alternative 1.</p>	<p>WS-New Mexico's use of lead would have no impact on the environment, humans, and domestic animals. Other entities would be expected to fill the need for lethal operational assistance to some degree, potentially resulting in greater risks to the environment, humans, and domestic animals. Without WS-New Mexico involvement, effects on the environment, humans, and domestic animals would be expected to be higher than under Alternatives 1-4.</p>
--	---	--	---	--

**Impacts of PDM Methods on the Environment and their Risk to Human/Pet Health and Safety: Chemical Methods**

<p><b>The analysis of impacts on soil, water, and terrestrial and aquatic species indicates there would be little to no</b></p>	<p>WS-New Mexico's impact on the environment, humans, and domestic animals would be less than Alternative 1. Other</p>	<p>WS-New Mexico's impact on the environment, humans, and domestic animals would be slightly less than Alternative</p>	<p>WS-New Mexico's impact on the environment, humans, and domestic animals would be less than Alternatives 1 and 3.</p>	<p>WS-New Mexico would have no impact on the environment, humans, and domestic animals. Other entities would be expected to fill the</p>
---	--	--	---	--

<p><b>impact on the environment from WS-New Mexico's use of chemical methods. Risks to humans and domestic animals from WS-New Mexico's use of chemical methods are very low to negligible due to protective measures.</b></p>	<p>entities would be expected to fill the need for lethal operational PDM to some degree, however because authorized use of chemical methods by other entities is limited, the risks to the environment, humans, and domestic animals would be less than under Alternative 1.</p>	<p>1. Other entities would be expected to fill the need for lethal operational PDM to some degree, however because authorized use of chemical methods by other entities is limited, the risks to the environment, humans, and domestic animals would be less than under Alternative 1.</p>	<p>Other entities would be expected to fill the need for lethal operational PDM to some degree, however because authorized use of chemical methods by other entities is limited, the risks to the environment, humans, and domestic animals would be less than under Alternative 1.</p>	<p>need for lethal operational PDM assistance to some degree, however because authorized use of chemical methods by other entities is limited, the risks to the environment, humans, and domestic animals would be less than under Alternative 1.</p>
--	---	--	---	---

**Impacts on Special Management Areas (SMAs)**

<p><b>WS-New Mexico would respond to PDM requests by land management agencies, state agencies, or livestock permittees on SMAs. In responding to requests, WS-New Mexico would work in close coordination with the land management agency, and comply with MOUs, applicable laws, agency policies, annual work plans, and as applicable, minimum requirements analyses. Currently, requests for assistance in SMAs are infrequently and of short duration. WS-New Mexico has negligible effects on SMAs.</b></p>	<p>WS-New Mexico impact on SMAs would be less than Alternative 1. Other entities are expected to fill the need for lethal PDM to some degree through other legal methods, as authorized by state agencies in coordination with land management agencies. Impacts on SMAs from state and other federal agency PDM activities would be similar to Alternative 1. Impacts on SMAs from other private entities would be expected to be higher than under Alternative 1.</p>	<p>WS-New Mexico impact on SMAs would be slightly less than Alternative 1. Other entities would be expected to fill the need for lethal operational assistance to some degree, as authorized by state agencies in coordination with land management agencies, if they determine that lethal PDM is immediately necessary. Impacts on SMAs from state and other federal agency PDM activities would be similar to Alternative 1. Impacts on SMAs from other private entities would be expected to be higher than under Alternative 1.</p>	<p>WS-New Mexico impacts on SMAs would be slightly less than Alternatives 1 and 3. Other entities are expected to fill the need for lethal PDM to some degree through other legal methods, as authorized by state agencies in coordination with land management agencies. Impacts on SMAs from state and other federal agency PDM activities would be similar to Alternative 1. Impacts on SMAs from other private entities would be expected to be higher than under Alternative 1.</p>	<p>WS-New Mexico would have no impacts on SMAs. Other entities are expected to fill the need for lethal PDM to some degree through other legal methods, as authorized by state agencies in coordination with land management agencies. Impacts on SMAs from state and other federal agency PDM activities would be similar to Alternative 1. Without WS-New Mexico involvement, impacts on SMAs from other private entities would be expected to be higher than under Alternatives 1-4.</p>
--	---	--	--	---



## 14. Accomplishment of Goal and Objectives

Table 3.23 in Section 3.12 of the EA compares the ability and extent of each alternative to meet the goal and objectives defined in EA Section 1.5.3. The objectives analysis is distinct from the analysis of environmental consequences of the alternatives. By evaluating the ability of the alternatives to meet the overall goal and objectives, we were able to compare the results to the environmental consequences of the alternatives on the human environment to help make an informed decision that would best meet the competing needs for PDM.

The goal of WS-New Mexico is to respond in a timely and appropriate way to all requests for assistance (EA Section 1.5.3). WS-New Mexico also developed objectives for implementing PDM to protect various resources and evaluate impacts on the human environment. The EA incorporates these objectives throughout the document and evaluates the alternatives' ability to meet them in Section 3.12. WS-New Mexico relied on this comparison as part of the decision-making process. WS-New Mexico evaluated the 5 alternatives for implementing PDM and considered the numerous related issues. The analysis showed that none of the alternatives would have significant impacts on the human environment. We also evaluated the ability of WS-New Mexico to implement PDM and achieve the stated goal and objectives. Only Alternative 1, the Proposed Action, met both the goal and all objectives (Table 3).

Alternative 1 meets all the EA's objectives for implementing PDM. Under Alternative 2, WS-New Mexico would not be able to use the Decision Model to develop a strategy or select lethal methods for PDM where non-lethal methods are unlikely to be successful. Additionally, under Alternative 2, WS-New Mexico would not be able to consider or utilize new and existing lethal PDM technologies, where appropriate, into operational assistance strategies. Under Alternative 3, WS-New Mexico would not be able to use the Decision Model to develop a strategy incorporating lethal PDM methods until after non-lethal methods had been attempted and proven unsuccessful. Alternative 4 does not meet all objectives because WS-New Mexico would only be allowed to use the Decision Model to apply integrated PDM in certain situations. Alternative 5 meets only one objective; ensuring that cumulative effects do not negatively affect the viability of any native predator populations.

**Table 3. Summary of the Ability of Each Alternative to Meet WS-New Mexico’s Objectives for PDM Implementation**

<u>Alternative 1 Proposed Action/No Action</u> <u>Alternative: Continue WS- New Mexico PDM Activities</u>	<u>Alternative 2 WS-New Mexico</u> <u>Provides Lethal and Non-lethal PDM Technical Assistance and Only Non-lethal Preventive and Corrective Operational Assistance</u>	<u>Alternative 3 WS-New Mexico</u> <u>Provides Non- lethal PDM Assistance before Lethal Assistance</u>	<u>Alternative 4 WS-New Mexico WS- New Mexico</u> <u>provides lethal PDM only for human/pet safety or to protect ESA listed species</u>	<u>Alternative 5 No WS-New Mexico PDM Activities</u>
<b>Objective 1. Professionally and proficiently respond to all reported and verified losses or threats due to predators using the PDM approach using the Decision Model. PDM must be consistent with all applicable federal, state, and local laws, APHIS-WS policies and directives, cooperative service agreements, MOUs, and other requirements as required for any decision resulting from the Final EA.</b>				
Meets objective.	Does not meet objective.	Does not meet objective.	Does not meet objective.	Does not meet objective.
<b>Objective 2. Implement PDM such that cumulative effects do not negatively affect the viability of any native predator populations.</b>				
Meets objective.	Meets objective.	Meets objective.	Meets objective.	Meets objective.
<b>Objective 3. Ensure that all PDM activities conducted by WS-New Mexico align with the management goals and objectives of applicable wildlife damage management plans or guidance as determined by the jurisdictional state, tribal, or federal wildlife management agency.</b>				
Meets objective.	Meets objective.	Meets objective.	Meets objective.	Does not meet objective.
<b>Objective 4. Minimize non-target effects by using the Decision Model to select the most effective, selective, and humane remedies available, given legal, environmental, and other constraints.</b>				
Meets objective.	Meets objective.	Meets objective.	Meets objective.	Does not meet objective.
<b>Objective 5. Incorporate the use of appropriate and effective new and existing lethal and non-lethal technologies, where appropriate, into technical and operational assistance strategies.</b>				
Meets objective.	Does not meet objective.	Meets objective.	Does not meet objective.	Does not meet objective.

## 15. Decision

I have carefully reviewed the Final EA and the input resulting from agency review and the public involvement process. I find that none of the alternatives will have a significant impact on the human environment. However, I find that Alternative 1, the Proposed Action, best addresses the need for action and issues identified in the Final EA. Alternative 1 is selected because: (1) it offers the greatest chance at maximizing effectiveness and benefits to the broadest range of affected resources within current regulatory constraints; (2) it offers a balanced approach to the issues of humaneness, ethics, and recreation, public and pet health or safety, and impacts on SMAs when all facets of the issue are considered; (3) it will continue to minimize risk of wildlife conflicts with the public through consultation and coordination with land management agencies and tribes; (4) it will minimize risks to non-target species, including T&E species; (5) it will result in low magnitude of effects on predator populations, with moderate effects being short-term, localized, intentional, and in accordance with the direction of NMDGF or USFWS; and, (6) impacts on target predator populations would not be of significant magnitude, scope, or duration to result in substantial indirect impacts due to trophic cascades. Alternative 1 also offers maximum opportunity for tribal consultation and participation in PDM decision-making, and it facilitates efforts to reduce risk of adverse impacts on sites of cultural importance to the tribes, tribal uses of natural resources, and cultural practices of tribal members.

## 16. Finding of No Significant Impact

The analysis in the Final EA indicates that Alternative 1, the Proposed Action, does not constitute a major federal action significantly affecting, individually or cumulatively, the quality of the human environment. I agree with this conclusion and, therefore, determine that WS-New Mexico will not prepare an Environmental Impact Statement (EIS). This determination is based on consideration of the following factors:

- A. The proposed activities will occur in limited areas of New Mexico, when requested, and are not national or regional in scope (EA Section 1.9.4).
- B. The proposed activities will not significantly affect human health and safety. PDM methods are target specific and are not likely to adversely affect human health and safety (EA Section 3.10). In some cases, WS-New Mexico may conduct PDM to reduce risks to human health and safety caused by predators. WS-New Mexico is not aware of members of the public harmed in New Mexico by its PDM activities.
- C. The proposed activities will not have an impact on unique characteristics of the geographic area, such as historic or cultural resources (EA Section 1.10.2.3) or ecologically critical areas (EA Sections 3.3, 3.6.5, 3.8, and 3.11). The nature of the methods proposed for removing predators for damage management do not significantly affect the physical environment. WS-New Mexico has consulted with public land management agencies during development of this Final EA. We will continue to consult with them on work plans to identify sensitive areas and times when PDM actions may need to be avoided or modified to minimize risks of significant beneficial or negative impacts on these types of areas or to the general public. WS-New Mexico will conduct PDM in SMAs in accordance with applicable MOUs, AWP's, the land management agency's approval (as applicable), land and resource management plans, and regulations, and any necessary Minimum Requirements Analyses (EA Section 1.8 and 3.11).

- D. Data contained in the EA (Section 3.5) make clear that the number of predators taken by WS-New Mexico will not have a significant impact on target predator populations, preserving an abundance of predators for future viewing enjoyment by the public. The effects on the quality of the human environment of the proposed activities are not highly controversial. Although some people oppose aspects of PDM, the methods and impacts of PDM are not controversial among experts in the field of managing wildlife conflicts (EA Section 1.10.2.1).
- E. The possible effects of the proposed activities on the quality of the human environment are not highly uncertain and do not involve unique or unknown risks (EA Section 1.10.2.2). Although exact population estimates are not available for some target species, the Final EA uses the best information available. This Final EA uses conservative population estimates and evaluates the upper limit of take to provide upper bounds on the impacts that might occur. Even when using conservative population estimates and overestimates of potential take, the analysis showed that WS-New Mexico PDM activities will not result in significant impacts to any species. WS-New Mexico further ensures there are no significant unintended adverse impacts by consulting and coordinating with state and federal agencies with management responsibility for preserving sustainable populations of target and non-target species and ecosystems, and by project monitoring. Consultation and coordination with state and federal land management agencies during the annual work planning process also minimizes potential adverse effects to recreation. The proposed activities are routinely employed to alleviate wildlife damage across APHIS-WS. Methods/strategies proposed for use are not new or untested, and WS-New Mexico employees are trained and experienced in their application.
- F. The proposed activities do not establish a precedent for actions with future significant effects or represent a decision in principle about a future consideration. WS-New Mexico makes damage management decisions based on the analysis in the Final EA, and it does not set a precedent for other APHIS-WS state decision-making. Damage management decisions made for each APHIS-WS state are made independently, based on: state-specific information on wildlife populations and ecosystems; state-specific land use patterns; state, local, and tribal regulations and policies; state-specific wildlife management plans and objectives; and, other state and local factors, including the types of PDM services requested and authorized by state and local (*e.g.*, county) management entities.
- G. This EA does not identify any significant cumulative effects. WS-New Mexico will coordinate all PDM activities, including removal, with the applicable regulatory agency (*e.g.*, USFWS, NMDGF, NMDA, BLM, USFS) to help ensure cumulative impacts of WS-New Mexico's actions do not have significant adverse impacts on native wildlife populations and ecosystems. Analysis of direct, indirect, and cumulative impacts on target and non-target species indicates that the impacts of WS-New Mexico's predator take is not of significant duration, scope, or magnitude to result in sustained reductions in predator populations and associated potential for trophic cascades. NMDGF manages species under its authority for long term sustainable harvest. NMDGF imposes harvest restrictions as necessary to meet approved management goals. Coyote harvest, while numerically large, has had no adverse effect on the New Mexico population's sustainability (EA Section 3.5.3). WS-New Mexico continues coordination with USFWS and NMDGF to avoid unintentional take of threatened and endangered species and has completed Section 7 consultation with USFWS for listed species in New Mexico (EA Section 1.8.2).
- H. The proposed activities do not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Historic Register of Historic Places, nor will they cause loss or destruction of significant scientific, cultural, or historical resources. In general, PDM does

not have the potential to affect historic resources. WS-New Mexico will engage in consultation if it anticipates that responding to a PDM request will affect historic resources. WS-New Mexico contacted all federally recognized tribes in the state during preparation and review of this EA. Tribes were invited to participate in the EA process and were provided the Agency Pre-decisional Draft EA to review. None of the tribes submitted comments back to WS-New Mexico.

**For additional information regarding this decision, please contact Jon Grant, State Director, USDA-APHIS-Wildlife Services, 8441 Washington St. NE Albuquerque, NM 87113.**

---

Keith Wehner  
Director, Western Region  
USDA-APHIS-Wildlife Services

---

Date