

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

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

**July 15, 2020**

### **1. Introduction**

Wildlife in Nevada is an important part of the social fabric that comprises the human environment. Abundant wildlife populations interact with the 3.1 million citizens of the state every day. Wildlife brings joy and happiness, improves the quality of life, and at times, brings conflict, damage, and some frustration. As human populations expand and more land is used for human needs, there is also increased potential for conflicting human/wildlife interactions. United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) responds to requests from individuals, organizations, and agencies experiencing damage caused by predators in Nevada. WS's State Office in Nevada 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 Nevada (WS-Nevada) and Nevada Department of Agriculture-Nevada Wildlife Services (NDA-WS) form the federal and state components of WS-Nevada collaboration. WS-Nevada refers to this joint agency, whereas NDA-WS refers to just the state component.

In 2016, WS-Nevada began the process of preparing an Environmental Assessment (EA) evaluating the potential environmental impacts of alternatives for WS-Nevada involvement in predator damage management activities (PDM) in the state. We wrote the new EA to provide additional information in a format more informative to the public. The EA was prepared in cooperation with United States Bureau of Land Management (BLM), the United States Forest Service (USFS), United States Fish and Wildlife Service (USFWS), Nevada Department of Agriculture (NDA) and Nevada Department of Wildlife (NDOW). We have also completed Endangered Species Act consultations with the U.S. Fish and Wildlife Service (USFWS) for activities proposed in this EA. This Decision document provides notification of WS-Nevada's choice of an alternative and determination regarding the environmental impacts of the chosen alternative.

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

The purpose of the proposed action 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 human health and safety in Nevada. Details on the need for action to resolve these conflicts are provided in Section 1.11 of the EA. The predator species in Nevada that cause damage to livestock, natural resources, property, or threaten human health and safety include coyote (*Canis latrans*), common raven, (*Corvus corax*), badger (*Taxidea taxus*), mountain lion (*Puma concolor*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), bobcat (*Lynx rufus*), red fox (*Vulpes vulpes*), free-ranging/feral dog (*Canid familiaris*), kit fox (*Vulpes macrotis*), black bear (*Ursus americanus*), free ranging/feral cat (*Felis domesticus*), gray fox (*Urocyon cinereoargenteus*), spotted skunk (*Spilogale gracilis*), mink (*Mustela vison*), weasels (*Mustela spp.*), and ring-tailed cat (*Bassiscus astutes*).

### **3. Public Involvement**

On November 4, 2016, WS-Nevada began a scoping phase and issued an invitation soliciting public comments. WS-Nevada posted notices of the invitation for comment in the APHIS Stakeholder Registry, the WS NEPA web page, and the federal e-rulemaking portal (Regulations.gov). WS-Nevada published a Legal Notice in the *Nevada Appeal* on November 2-4, 2016. The comment period closed on December 14, 2016. WS-Nevada received and reviewed 20 submissions during the scoping phase.

On November 20, 2019, WS-Nevada solicited public comment on alternatives and issues addressed in the Pre-decisional Draft of the 2020 EA: Predator Damage Management in Nevada. We received 1,699 submissions in response to the request for public comments. We considered all comments and responded to them 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 listed above for the Pre-decisional EA. Through the public involvement process, WS-Nevada communicated to the public and interested parties the analyses of potential environmental impacts on the quality of the human environment.

### **4. Tribal Involvement**

In 2016, WS-Nevada sent an invitation to participate in the development of the EA and the offer of consultation to all federally recognized tribes in Nevada. In response, WS-Nevada received 2 phone calls from tribes, one seeking clarification of the intent of the EA and the other expressing support for the process. In the spring of 2019, WS-Nevada sent all federally recognized tribes in Nevada a copy of the Draft EA for their review, along with another invitation to engage in consultation. The Summit Lake Paiute Tribe provided comments in a letter dated June 3, 2019. In October 2019, WS-Nevada and the Summit Lake Paiute Tribe met to discuss the EA and how PDM activities may affect the tribe and their cultural values. Sections 1.8.3 and 3.12.3 of the EA provide additional detail on those meetings and the outcomes. We address their specific concerns in section 3.12.3.2 of the EA.

### **5. Related Analyses**

This Decision and FONSI, and the final 2020 EA on PDM in Nevada will replace the 2011 PDM EA and FONSI/Decision.

### **6. Affected Environment**

Although the range and habitat used by individual species varies, at least some of the predators discussed in the EA can be found 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-Nevada would only conduct PDM when requested by a landowner, affected resource owner or manager, land manager, or tribe, and only on properties where a documented Work Initiation Document, Work Plan, or other comparable document has been established with the cooperating entity. Upon receiving a request for assistance, PDM activities could be conducted on federal, state, tribal, municipal, and private properties in Nevada. WS-Nevada will coordinate actions on public lands with the appropriate management agency, and its actions will be consistent with applicable land and resource management plans. The types of permissible activities that may be conducted on public lands varies among sites, as does the potential for conflicts with wildlife. For example, WS-Nevada would conduct work proposed in wilderness areas in accordance with applicable BLM or USFS implementing regulations to ensure actions do not violate the intent of the land designation. This includes using a limited set of tools that

have been determined to meet the unique management goals for wilderness areas (EA Section 2.3.2). As applicable, a Minimum Requirements Analysis (MRA) will be prepared by the land management agency to determine if the proposed action conflicts with land use policies.

WS-Nevada will not conduct any activities on National Recreation Areas, National Park Service Lands, USFWS refuges, Research Natural Areas, or the Inyo National Forest. Those lands are excluded from the scope of this analysis, and any future requests for assistance on those lands will be subject to additional NEPA documentation.

Approximately 88% of the land in Nevada is non-private (meaning the county, state, or federal governments manage them). An estimated 68% of WS-Nevada responses to predator-human conflicts occur on federally managed lands, while 32% of the responses to predator-human conflicts occur on private lands. WS-Nevada concentrates more effort per acre on private lands because predator damage tends to be higher there, due to vulnerable resources maintained in those areas (EA Section 1.11.2.7).

## 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.

- Impacts to Populations of Predator Species Taken Intentionally – What might be the direct, indirect, and cumulative impacts of removing predators on target predator populations?
- Impacts on Species that May Be Taken Unintentionally – What might be the direct, indirect, and cumulative impacts on non-target wildlife populations and ecosystems? What are the potential impacts on threatened and endangered (T/E) species?
- Potential for WS-Nevada Integrated Predator Damage Management (IPDM) Activities to Contribute to or Cause Ecological Trophic Cascades – How would the alternatives impact trophic cascades, biodiversity, and ecosystem resilience? Does PDM cause trophic cascades, loss of biodiversity, declines in habitat quality due to unbalanced ungulate populations, or broad wildlife population changes which impact the ecosystem?
- Humaneness and Ethics Related to WS-Nevada Use of IPDM 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?
- Potential Effects of IPDM Methods on the Environment and Their Risks to Human/Pet Health and Safety - What are the potential risks and benefits of PDM methods to human and pet health and safety?
- Effects on Wilderness Areas and Wilderness Study Areas – How would PDM affect the wilderness character of wilderness areas and wilderness characteristics of wilderness study areas?
- Cultural Impacts, Including Impacts on Native American Cultural Uses, Hunting, Non-Consumptive Uses, and Aesthetic Impacts –What would be the direct, indirect, and cumulative impacts on cultural interests? How might the proposed alternatives affect tribal interests and resources? The issue of humaneness and other sociological issues, including ethical perceptions pertaining to PDM, can be interpreted in a variety of ways depending upon individual perspectives, philosophies, and experience. What are the varying perspectives on this issue relative to the proposed management actions for each alternative?

We considered 15 additional issues in the EA but we did not analyze them in detail. (See Section 3.3). WS-Nevada'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, and were incorporated into the analysis in Chapter 3 of the EA, as appropriate. We also made small adjustments in Chapters 1 and 2 to provide clarification and additional information.

## **8. Alternatives Analyzed in Detail**

Chapter 3 of the Final EA considered and analyzed 5 alternatives that were developed to address the 7 primary issues identified. Twenty-five additional alternatives were considered, but not analyzed in detail in the EA (EA Section 2.5). The following is a summary of the management alternatives considered in detail in the EA.

- **Alternative 1: No Action Alternative – Continue WS-Nevada PDM Assistance Outside of Wilderness Areas and Wilderness Study Areas.**

This is the “No Action” Alternative, as defined by the Council on Environmental Quality for ongoing programs. Under this alternative, WS-Nevada PDM uses the full range of legally available methods in accordance with applicable federal, state and local laws, and only conducts PDM in wilderness areas (WA) and wilderness study areas (WSA) in emergency situations to protect human health or safety.

Under this alternative, WS-Nevada would continue to provide information and training on the use of nonlethal methods, including, but not limited to, herding and other livestock management and cultural practices, livestock guarding animals, exclusion, and frightening devices (See Appendix A). WS-Nevada would also continue to provide direct control assistance upon request. The methods which might be used by WS-Nevada would include a variety of frightening devices, ground shooting, aerial PDM, denning, various trap devices, snares, trained decoy and tracking dogs, DRC-1339 for raven management, and M-44s for canid predators. Work Plans with federal and state land management agencies would be developed and reviewed annually to address specific activities and restrictions required to safely conduct PDM on public lands.

Alternative 1 is the baseline against which all other alternatives are compared as explained in Section 3.1 in the EA. A more detailed discussion about Alternative 1 can be found in Section 3.1, 3.2.1, 3.3.1, 3.4.1, 3.5.1, 3.6.1 and 3.7.1 in the EA.

- **Alternative 2: Proposed Action Modified Current Program.**

This alternative is similar to Alternative 1, in that WS-Nevada would provide IPDM, including both non-lethal and lethal recommendations during technical assistance, as well as lethal and non-lethal operational PDM. WS-Nevada would provide assistance where requested, in coordination with landowners or managers, and after completion of any additional necessary environmental review (as described in section 1.8.2.3 of the EA).

This alternative differs from Alternative 1 because WS-Nevada would be able to respond to requests for assistance in WAs and WSAs in both emergency and non-emergency situations. WS-Nevada has proposed and analyzed a limited set of methods that would be available for use in WAs and WSAs (EA Section 2.3.2.3). The EA analyzes these tools to determine their potential effects to wilderness character of WAs and wilderness characteristics of WSAs and to determine if they pose a significant adverse effect on the attributes protected by the Wilderness Act and the Federal Lands Policy and Management Act.

WS-Nevada worked closely with BLM and USFS to ensure the proposed activities will comply with all of the laws, regulations, and agency policies relevant to wilderness management. Together, the 3 agencies used an interdisciplinary approach to research, evaluate, and review the methods, proposed activities, and regulations related to PDM and wilderness management. The proposed action was designed to prevent conflict between the PDM activities and wilderness management policies and is consistent with the policies and requirements of BLM and USFS wilderness management.

WS-Nevada would limit its PDM actions in WAs to those necessary to prevent the serious loss of livestock or to protect human health and safety. WS-Nevada would conduct PDM actions in WSAs if they are necessary to protect domestic livestock or to protect human health and safety. While BLM and USFS policy allow for PDM for the protection of federally-listed threatened or endangered species, this EA and FONSI do not specifically address those activities. If a natural resource management agency identifies a need for such an action, WS-Nevada would analyze the specifics of such a project under separate NEPA analysis. WS-Nevada would not conduct preventive lethal PDM in WAs or WSAs. WS-Nevada would work with the federal land managers responsible for the administration of WAs and WSAs in accordance with those agencies implementing policies to determine the action areas, the minimum tools required, and any additional restrictions to preserve WAs and WSAs to the greatest extent practicable. All work in WAs and WSAs are subject to approval by the land management agency, and all actions in WAs are subject to completion of applicable Minimum Requirements Analysis (MRA).

The EA provides detailed discussion of Alternative 2, and WAs and WSAs, in Sections 1.8.2, 2.3.2, 3.11, and Appendix G.

- **Alternative 3: Non-lethal PDM Required Before Applying Lethal PDM**

Under Alternative 3, WS-Nevada would still use both non-lethal operational assistance and lethal technical assistance, as described in Alternatives 1 and 2. The difference is under what circumstances WS-Nevada would conduct lethal PDM. Under Alternative 3, WS-Nevada would not conduct preventive lethal PDM and, when responding to a damage incident, it would use non-lethal methods first, and until proven ineffective, regardless of severity, intensity, and immediacy of the damage or threat or the results of application of the APHIS-WS Decision Model. Under Alternatives 1 and 2, WS Nevada uses the Decision model, which gives preference to non-lethal methods but, where a non-lethal method is unlikely to be effective, WS-Nevada personnel may recommend lethal methods. Under Alternative 3, WS-Nevada could only conduct lethal PDM after all three conditions are met:

- Livestock grazing permittees and operators, landowners, and resource managers show evidence of sustained and ongoing use of nonlethal or husbandry techniques aimed at preventing or reducing predation prior to receiving WS-Nevada assistance with lethal PDM methods;
- Employees of WS-Nevada use or recommend appropriate and reasonable non-lethal techniques in response to a confirmed damage situation prior to using lethal methods; and
- WS-Nevada has recorded and confirmed that the use of reasonable non-lethal techniques had failed to keep livestock or other losses below an acceptable level, as determined by the cooperator.

WS-Nevada would not consider depredation from previous years or seasons as consideration for applying lethal management. Cooperators would still have the option of implementing lethal

control measures on their own or through commercial companies (where authorized by necessary resource management agency). WS-Nevada would continue to recommend lethal and non-lethal management when and where appropriate as technical assistance.

Section 2.4 of the EA details the minimization measures, including APHIS-WS Directives, state laws, and regulations pertinent to this alternative. Chapter 3 of the EA provides discussion and comparative analysis of this alternative.

- **Alternative 4: WS-Nevada Provides IPDM Lethal Assistance Only for Cases of Human/Pet Health or Safety**

Under Alternative 4, WS-Nevada would only provide full IPDM technical assistance, including both lethal and non-lethal methods, and lethal operational assistance when requested for protecting human/pet health or safety. For all other operational assistance WS-Nevada would only use non-lethal methods.

Section 2.4 of the EA details the minimization measures, including APHIS-WS Directives, state law and regulation pertinent to this alternative. Discussion and comparative analysis of this alternative are found in Chapter 3 of the EA.

- **Alternative 5: No WS-Nevada Involvement in PDM Activities**

APHIS-WS in Nevada (referred to as WS-Nevada) and NDA-WS form the federal and state components of WS-Nevada collaboration. Under alternative 5, federal employees of WS-Nevada would not be involved in any predator damage management efforts in Nevada. PDM would still be implemented by other legally-authorized entities, such as NDA-WS, NDOW, USFWS, property/resource owners, commercial PDM companies, and certified NDOW volunteers (EA Sections 1.7 and 2.3.1.10). M-44s would not be used, however DRC-1339 is available as a tool under this alternative for the state component. Entities experiencing damage caused by predators could continue to resolve damage by employing all methods legally available.

WS-Nevada would not provide assistance with any aspect of managing predator damage, including lethal and non-lethal technical or operational assistance and actions. Requesters would need to seek PDM information on existing and new methods (including methods developed and tested by the APHIS-WS NWRC) from other sources, such as NDOW, University of Nevada Extension Service offices, or pest control companies.

Chapter 3 of the EA provides a more detailed discussion about Alternative 5.

## **9. Monitoring**

Under Alternative 2, WS-Nevada will monitor program activities annually to determine whether the analyses and determinations in the EA adequately address current and anticipated future program activities, and whether there is new information that warrants supplementing or replacing the EA. Under the Proposed Alternative, WS-Nevada will provide data to all applicable natural resource management agencies (including, NDOW, USFWS, BLM, USFS, and NDA) on the take of target and non-target animals. The data will help ensure the cumulative impact on wildlife populations, including WS actions, do not adversely impact the viability of state and USFWS managed 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. All studies and publications provided to us have been reviewed and incorporated in the final EA where applicable. The American Veterinary Medical Association (AVMA) updated their guidelines on euthanasia in early 2020. The guidance has been reviewed and the citation updated in the EA. There were no changes that required altering the analysis.

## 11. Clarifications to the Draft EA

WS-Nevada has made general edits to the 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 Draft EA and more fully describe potential effects of WS-Nevada PDM under the alternatives. Key items are:

- Citations in the EA were reviewed and corrected where inaccurate.
- Language in several sections was updated to make the meaning and intent more clear.
- Research Natural Areas were added to the list of lands excluded from proposed PDM activities.
- Added Section 1.10.3.13 – “Congressional Grazing Guidelines.”
- Added Section 1.10.44 – “What is the environmental baseline used by WS-Nevada to evaluate significant impacts?”
- Revised the anticipated take of common ravens in Section 3.5.4. The 2018 bioenergetics model for calculating take from the use of DRC-1339 may result in higher estimates of take for the anticipated raven PDM activities than would have been estimated under old methods. The proposed take of 5,700 provided in the Draft EA has been increased to 10,000 to ensure consistency between the analysis, planning, and reporting of activities under the proposed action. The updated proposal of 10,000 ravens is still well below the 19,042 ravens that USFWS analysis indicated could be taken in Nevada without adverse effect to the population.
- Added Section 3.6.4.6 – “Desert Tortoise Impacts.” This analysis was completed as part of Endangered Species Act consultation in late 2018, but was inadvertently left out of the draft EA.
- Updated Section 3.9.5.1 – Incorporated a citation from American Society of Mammologists on the use of traps and updated the citation for AVMA Guidelines for the Euthanasia of Animals to the newly-released 2020 edition.
- Clarified Section 3.11 by converting the narrative on land area into tables and figures for ease of reading and comprehension.
- Clarified information in Table 3-24 to show that alternatives that only partially met objectives were represented as “Do Not Meet”. This does not alter any of the analysis of environmental effects.

## 12. Use of the Best Available Science

In order to conduct efficient and effective PDM and be aware of new information, WS-Nevada used the best available data and information from wildlife agencies having jurisdiction by law (NDOW, and USFWS; 40 CFR §1508.15), as well as the 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 conducts a detailed analysis of the alternatives based on the issues identified in Section 3.2. Table 1, below, summarizes those analyses, with a brief narrative summarizing key facts and findings. Chapter 3 of the EA details all of the topics highlighted here.

After reviewing the EA and carefully evaluating all alternatives, WS-Nevada has determined that Alternative 2 offers the greatest opportunity to meet WS-Nevada's purpose and need within current funding constraints. Alternative 2 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. PDM activities in WAs and WSAs, as defined under Alternative 2, best enable WS-Nevada to respond to the full range of needs for action in the state without having a substantial effect on wilderness characters or characteristics. The environmental impacts of WS-Nevada PDM activities to protect livestock in WAs and WSAs, conducted in accordance with the Wilderness Act, the Federal Land Policy and Management Act, and land-management agency policies, will stay within the parameters addressed by the EA.

The restrictions on areas where WS-Nevada may conduct PDM and available PDM methods for private PDM providers and individuals under Alternatives 1, 3, 4, and 5 could result in less effective resolution of PDM issues. Non-WS entities may provide PDM, but there are large variances in the quality of the services and the accountability to the public. Should WS-Nevada be unable to provide PDM, there would likely still be some level of PDM available to those experiencing damage, and WS-Nevada has analyzed the effects of reasonably foreseeable non-WS participation. Section 3.4.1 of the EA discusses how other entities may conduct PDM where WS-Nevada is limited or absent.

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

The EA indicates that WS-Nevada's use of lethal methods would not have significant impacts on target species populations under any of the alternatives analyzed. Moreover, WS-Nevada's analysis of impacts on target species is predicated on conservative estimates of population size which would overstate the actual impact. WS-Nevada's lethal take of target species would be highest under Alternative 2, followed by Alternative 1. Alternative 3 might result in higher levels of displacement of target species associated with increased use of nonlethal methods, such as frightening devices. Under Alternatives 4, WS-Nevada would only conduct lethal PDM for human/pet safety, and there would be no lethal PDM conducted by WS-Nevada under Alternative 5.

Cumulative target take by WS-Nevada and non-WS entities is anticipated to be similar or slightly higher under Alternative 2 than under Alternative 1. This is due to increased ability to respond to requests for assistance in WAs and WSAs. We have concluded, however, that PDM in WAs and WSAs will not greatly increase the total amount of target species take. Cumulative take would likely decline under Alternatives 3, 4, and 5 simply because WS-Nevada would conduct decreasing amounts of PDM activities under those alternatives. This is discussed in detail in section 3.4 of the EA.

#### **Impacts to Non-Target Species (EA Section 3.6 and 3.7)**

We have concluded that all five alternatives have low risks and potential impacts to non-target species. Moreover, WS-Nevada's analysis of impacts on non-target species is predicated on conservative estimates of population size which would overstate the actual impact.

Under Alternatives where WS-Nevada does not provide the full range of PDM assistance to all requestors (Alternatives 1, 3, 4, and 5), non-WS entities may conduct PDM and do not have the same

skill levels, equipment, experience with public land management agencies, or obligations under NEPA. This may result in minor variations in the risk and impact to non-target species. Lack of coordination increases potential risks of adverse impacts on recreation, WAs, and WSAs. As a result, overall risks to target and non-target species, public resources (e.g., WAs), and public safety would likely exceed that of Alternatives 1 or 2, but still would not be significant.

### **Ecological Trophic Cascades (EA Section 3.8)**

WS-Nevada's mission is to reduce damage or threats caused by predators, when requested, and in compliance with applicable 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 native species' populations. WS-Nevada does not strive to eliminate 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 predators or prey would be extirpated, and none would be introduced into an ecosystem. As discussed in detail in Section 3.8.3 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 state-wide predator distribution. We have determined, therefore, that WS-Nevada's proposed action under Alternative 2 is not of sufficient magnitude or scope to result in ecosystem-level shifts or trophic cascades. The EA discusses trophic cascades extensively in Sections 1.10.2, 3.2.3, 3.8, Appendix F, and addresses public comments specific to this issue in 5.30.

### **Ethics and Humaneness (EA Section 3.9)**

The analysis in Section 3.9.6 determined that Alternatives 1 and 2 are likely to be the most humane, with Alternatives 3 and 4 being less humane, and Alternative 5 being the least humane. This determination was largely based on the professional skills and commitment of the APHIS-WS to humaneness (Directive 1.301) that are unlikely to be replicated by non-WS entities in Alternatives with less WS-Nevada involvement. The EA discussed perspectives on humaneness and ethics related to predator damage management, and each PDM method was evaluated 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. PDM methods were evaluated for humaneness and alternatives were evaluated for how humane PDM conducted under each alternative, by any entity, is reasonably foreseeable to be.

### **Impacts on the Environmental Resources and Risks to Human and Pet Safety (EA Section 3.10)**

We have determined that none of the alternatives have a significant impact on environmental resources or human and pet safety. Alternatives that limit WS-Nevada involvement in PDM (Alternatives 3, 4, and 5) may result in increased PDM by less skilled, non-WS entities, which could result in increased adverse effects compared to Alternatives 1 or 2, the Proposed Alternative.

The EA analyzed the potential effects of PDM methods on the environment and public safety, dividing them into 3 categories – mechanical/physical capture devices, chemical methods, and lead ammunition. Risks to humans and the environment from these methods are reduced through the implementation of minimization measures, detailed in EA Section 2.4. Risks to human health and safety from WS-Nevada's actions were determined to be low under all of the alternatives. All physical capture methods, aerial PDM, lead ammunition, sodium nitrate (gas cartridges),

immobilization and euthanasia drugs, and DRC-1339 are available to non-WS entities in some capacity. Therefore, risks may be slightly higher for alternatives that have increased PDM by non-WS entities (*i.e.*, Alternatives 3, 4, and 5), depending on the level of training and equipment available to the entities conducting PDM.

### **Wilderness Areas and Wilderness Study Areas (EA Section 3.11)**

Wilderness characteristics define lands included in the inventory of lands suitable for wilderness designation, and are possessed by all WSAs. Once land is designated as wilderness, the Wilderness Act mandates agencies to preserve the wilderness character of the land. Wilderness character is the combination of biophysical, experiential, and symbolic qualities that distinguish wilderness from other lands. In Section 3.11.1, the EA analyzed the potential effects of the limited PDM methods on all wilderness character and characteristics (described in Section 2.3.2.3). The ability of WS-Nevada to provide PDM in WAs and WSAs is the key difference between Alternatives 1 and 2. Alternative 2 would have a greater impact on wilderness character and characteristics than Alternative 1, which limited work in WAs or WSAs to cases of emergency human health and safety, because PDM would be allowed in WAs or WSAs. We determined that Alternative 3 would likely result in most degradation, impacting the untrammelled and natural qualities of wilderness character and opportunities for solitude. Under Alternative 3 WS-Nevada PDM activities could not be conducted in the most efficient manner because non-lethal PDM must be used, even where it is not likely to be successful, increasing the time and tools necessary to protect livestock. This would result in increased degradation of wilderness character of WAs (EA Section 3.11.1.3.1). Coordination with the land management agencies, the use of the WS Decision model, and preparation of Minimum Requirement Analysis, as applicable, will minimize any adverse effects to wilderness character/characteristics if WS-Nevada responds to requests for assistance in WAs or WSAs under Alternative 2.

### **Cultural Uses of Wildlife (EA Section 3.12)**

Implementation of PDM on any scale has the potential for creating short-term, localized, seasonal disturbance of sociocultural resources on public lands. Alternatives 1 and 2, however, minimize the impacts by using the WS Decision Model and Annual Work Plans for PDM, which determine the best approach and method(s) for resolving or preventing conflicts with predators and people. Alternatives that reduce the availability of WS-Nevada to provide PDM (Alternatives 3, 4, and 5) assistance will increase non-WS entity involvement in PDM (Section 2.3.1.10). Activities by private individuals are not required to coordinate with land management agencies, tribes, or NDOW to reduce exposure to the public viewing or recreational activities aside from restriction defined in Nevada State laws.

In Alternative 2, WS-Nevada's involvement in PDM provides the public involvement opportunities through NEPA and federal intergovernmental tribal consultation procedures. APHIS-WS policy invites the public to comment on EAs before decisions are made, allowing special interest groups and interested citizens a chance to review federal agency decision-making. The actions of non-WS entities are more difficult to assess, and those entities typically do not invite public comment on their actions. Further, unlike non-governmental entities, APHIS-WS has a trust responsibility to federally-recognized tribes, which include government-to-government relationship, consultation, and coordination. Alternative 2, and to a slightly lesser extent Alternatives 1 and 3, offer the greatest opportunities for tribal input and consultation on PDM because WS-Nevada conducts PDM in accordance with APHIS Directive 1040.3, "Consultation with Elected Leaders of Federally Recognized Indian Tribes." Alternatives 4 and 5 diminish the opportunities for tribal involvement because non-WS entities do not have the same obligations to federally-recognized tribes as federal agencies.

**Table 1. Environmental Issues and Needs for Action Compared for Each Alternative<sup>1</sup>**

<b>Issues</b>	<b>Alternative 1</b>	<b>Alternative 2</b>	<b>Alternative 3</b>	<b>Alternative 4</b>	<b>Alternative 5</b>	<b>Subject Matter and EA Section Reference</b>
	<b>No Action-Continue WS-Nevada IPDM Assistance Outside of Wilderness and Wilderness Study Areas</b>	<b>Proposed Action/Modified Current Program to Include IPDM in Wilderness and Wilderness Study Areas</b>	<b>Non-lethal IPDM Assistance before Recommending or Applying Lethal IPDM Assistance</b>	<b>Lethal IPDM Assistance Only for Human/Pet Safety</b>	<b>No WS-Nevada IPDM Activities</b>	
<b>WS Ability to Participate in Research</b>	High participation by WS-Nevada	High participation by WS-Nevada	Participation may be compromised depending on study design/requirements	Limited participation depending on study design/requirements	None	<i>Purpose and Need EA Section 1.5</i>
<b>WS Ability to Provide Education and Technical Assistance</b>	Full assistance available	Full assistance available	Full assistance available	Full assistance available	None	<i>Purpose and Need EA Section 2.3.1.4</i>
<b>Effects on Predator Species Populations in Nevada</b>	Little to no impact	Little to no impact	Little to no impact by WS-Nevada; increased impact by other entities because of WS unavailability.	Less impact than Alternatives 1, 2, and 3 by WS-Nevada; increased impacts by other entities in place of WS-Nevada.	No impact by WS-Nevada, increased activities by other entities with variable effects on populations.	<i>Issue EA Section 3.5</i>
<b>Take of Coyotes (60% threshold would affect the population)</b>	Analyzed <sup>2</sup> annual take of up to 16.39% of the statewide coyote population, WS-Nevada is unlikely to take that many.	Same as Alternative 1.	Likely a slight decrease in WS-Nevada take, increase in take by other entities. However, the cumulative take would still not approach the threshold.	Similar to Alternative 3, but with less WS-Nevada take and increased take by other entities. No anticipated adverse cumulative effects to the population.	No take by WS-Nevada, increased take by other entities. No anticipated adverse cumulative effects to the population.	<i>Sub-issue EA Section 3.5.3</i>

<sup>1</sup> None of the effects in the table rise to the level of significance; to the extent any effect is identified, it is used as a relative descriptor for effects below that threshold

<sup>2</sup> Analyzed annual take for all species in the EA represents an over-estimated amount of take that WS-Nevada is unlikely to reach. The effect of this level of take is based on conservative population estimates.

<b>Take of Mountain Lions (30% threshold would affect the population)</b>	Analyzed annual take of up to 2% of the statewide mountain lion population.	Same as Alternative 1.	Likely a slight decrease in WS-Nevada take, increase in take by other entities. However, the cumulative take would still not approach the threshold.	Similar to Alternative 3, but with less WS-Nevada take and increased take by other entities. No anticipated adverse cumulative effects to the population.	No take by WS-Nevada, increased take by other entities. No anticipated adverse cumulative effects to the population.	<i>Sub-issue EA Section 3.5.8</i>
<b>Take of Common Ravens (10% threshold could affect the population)</b>	Anticipated annual take of up to 5 % of the Nevada population.	Same as Alternative 1	Same take analyzed for Alternative 1, however restricted methods would result in less take.	Less raven take than under Alternatives 1, 2, and 3, due to limited raven threats to human and pet safety.	No take by WS-Nevada, increased take by other entities. No anticipated adverse cumulative effects on the population.	<i>Sub-issue Section 3.5.4, Appendix D</i>
<b>Take of Black Bear (20% threshold would affect the population)</b>	Analyzed annual take of up to 10 black bears per year, (1.82% of the Nevada population). Actual WS-Nevada take is expected to be half of that.	Same as Alternative 1.	Same as Alternative 1.	Similar to Alternative 1; however, only black bears threatening or causing damage to humans or pets would be taken. Increased take by other entities expected.	No black bear take by WS-Nevada, increased take by other entities.	<i>Sub-issue EA Section 3.5.5</i>
<b>Effects on Federally-listed Species</b>	Minimal effects, as determined by Section 7 consultation.	Minimal effects, as determined by Section 7 consultation.	Minimal effects, as determined by Section 7 consultation. Moderate risk by other entities.	Less effect than Alternatives 1, 2 and 3. All WS activities would comply with Section 7 consultation. Moderate risk by other entities.	No effect by WS-Nevada; moderate risk by other entities.	<i>Issue EA Section 3.6</i>
<b>Effects on Species Taken Unintentionally</b>	Minimal effect by WS-Nevada, moderate risk by other entities	Minimal effect by WS-Nevada, moderate risk by other entities	Minimal effect by WS-Nevada, moderate risk by other entities	Lowest effect by WS-Nevada, moderate risk by other entities	No effect by WS-Nevada, moderate risk by other entities	<i>Issue EA Section 3.7</i>
<b>Likelihood of PDM Causing a Trophic Cascade</b>	Highly unlikely	Highly unlikely	Less than Alternatives 1 and 2	Less than Alternatives 1, 2, and 3	None	<i>Issue EA Section 3.8</i>

<b>Effects on Humaneness and Ethics</b>	WS-Nevada upholds high standards of humaneness and ethics in accordance with applicable laws, AVMA and AFWA guidelines.	Same standards under Alternative 1.	WS-Nevada would continue to uphold the same standards as under Alternatives 1 and 2. Moderate effect from other entities.	WS-Nevada would continue to uphold standards under Alternatives 1, 2, and 3. Moderate effect from other entities.	No effect by WS-Nevada. Moderate effect from other entities.	<i>Issue EA Section 3.9</i>
<b>Effects of Methods on the Environment (soil, water, aquatic and terrestrial organisms)</b>	Little to no effect from WS-Nevada activities.	Same as Alternative 1	Little to no effect from WS-Nevada activities. Moderate risk by other entities.	WS-Nevada's effects on the environmental resources would be less than Alternatives 1, 2 and 3. Moderate effect by other entities.	No effect by WS-Nevada. Moderate effect by other entities.	<i>Issue EA Section 3.10</i>
<b>Effects of Mechanical Methods on the Environment</b>	Little to no effect from WS-Nevada activities.	Same as Alternative 1.	Little to no effect from WS-Nevada activities. Moderate effect by other entities.	Less effect than Alternatives 1, 2 and 3. Moderate effect by other entities.	No effect by WS-Nevada. Moderate effect by other species.	<i>Sub-issue EA Section 3.10.1</i>
<b>Effects of Lead Ammunition on the Environment</b>	Low impact on birds and mammals to negligible impact on soils, water, plants, aquatic species, and invertebrates.	Same as Alternative 1.	Slightly less than Alternatives 1 and 2. Moderate effect by other entities.	WS-Nevada's effects would be less than Alternatives 1, 2 and 3. Moderate effect by other entities.	No effect by WS-Nevada. Moderate effect by other entities.	<i>Sub-issue 3.10.2</i>
<b>Effects of Chemical Methods on the Environment</b>	Very low to negligible.	Same as Alternative 1.	Slightly less than Alternatives 1 and 2.	Less than Alternatives 1, 2 and 3. Other entities may still apply or use DRC-1339, sodium nitrate, or I&E drugs, likely resulting in low to negligible effect.	No effect by WS-Nevada. Other entities may still apply or use DRC-1339, sodium nitrate, or I&E drugs, likely resulting in low to negligible effect.	<i>Sub-issue EA Section 3.10.3</i>
<b>Risks of PDM to Safety of Recreation</b>	Very Low on private lands, unlikely on public lands	Very Low on private lands, unlikely on public lands	Very Low on private lands, unlikely on public lands.	Very Low on private lands, unlikely on public lands.	WS-Nevada would have no effect. Moderate effect by other entities.	<i>Issue EA Section 3.10</i>

<b>Effects of Mechanical Methods on Public Health and Safety</b>	Little to no effect from WS-Nevada activities.	Same as Alternative 1	Little to no effect from WS-Nevada activities. Moderate effect by other entities.	Less effect than Alternatives 1, 2 and 3. Moderate effect by other entities.	No effect by WS-Nevada. Moderate effect by other species.	<i>Sub-issue EA Section 3.10.1</i>
<b>Effects of Lead Ammunition on Public Health and Safety</b>	Low to Negligible.	Same as Alternative 1.	Slightly less than Alternatives 1 and 2. Moderate effect by other entities.	WS-Nevada's effects on humans and domestic animals would be less than Alternatives 1, 2 and 3. Moderate effect by other entities.	No effect by WS-Nevada. Moderate effect by other entities.	<i>Sub-issue 3.10.2</i>
<b>Potential for Meat Donation by WS-Nevada</b>	None	None	None	None	None	<i>Sub-issue EA Section 3.10.2.6</i>
<b>Effects of Chemical Methods on Public Health and Safety</b>	Very low to negligible.	Same as Alternative 1.	Slightly less than Alternatives 1 and 2.	Less than Alternatives 1, 2 and 3.	No effect.	<i>Sub-issue EA Section 3.10.3</i>
<b>Use of M-44s on Public Lands</b>	Yes, but not in WAs or WSAs.	Yes, but not in WAs.	Yes, but not in WAs.	Yes, only for protection of human and pet safety. Not in WAs.	No	<i>Sub-issue EA Section 2.3</i>
<b>Use of Aerial PDM on Public Lands</b>	Yes, but none in WAs or WSAs.	Yes, but none in WAs.	Yes, but none in WAs.	Yes, only for protection of human and pet safety. None in WAs.	No	<i>Sub-issue EA Section 2.3</i>
<b>Effects on WAs and WSAs</b>	Minimal (only work in WA or WSA once every 5-10 years)	Some minimal and short-term effects, as coordinated with land management agency.	Potential for more effect than Alternatives 1 and 2, but only as approved by the land managing agency during the AWP/MRA processes. Potential for little effect by other entities.	WS-Nevada effects on WAs and WSAs would be similar to Alternative 1 and less than Alternatives 2 and 3. Little effect by other entities.	WS-Nevada would have no effect on WAs and WSAs. Little effect by other entities.	<i>Issue EA Section 3.11</i>
<b>Effect on Untrammeled Quality of Wilderness Character</b>	None	No substantial effect	Possibly more effect than Alternative 2	Less than Alternatives 2 or 3	None	<i>Sub-issue EA Section 3.11.1.2.1</i>
<b>Effect on Natural Quality of Wilderness Character</b>	None	No substantial effect	Similar to Alternative 2.	Similar to Alternative 2.	None	<i>Sub-issue EA Section 3.11.1.2.2</i>

<b>Effect on Undeveloped Quality of Wilderness Character</b>	None	No impact	Possibly more effect than Alternative 2.	Possibly more effect than Alternatives 2 and 3.	None	<i>Sub-issue EA Section 3.11.1.2.3</i>
<b>Effect on Opportunities for Solitude and Recreation Quality of Wilderness Character</b>	None	Short-term and minimal	Possibly more effect than Alternative 2.	Possibly more than Alternative 2 or 3.	None	<i>Sub-issue EA Section 3.11.1.2.4</i>
<b>Effects on Other Features of Value</b>	None	Unlikely	Unlikely	Unlikely	None	<i>Sub-issue EA Section 3.11.1.2.5</i>
<b>Impacts to WSA Characteristics</b>	None	Negligible	Greater effects than Alternative 2.	Less effect than Alternatives 2 and 3.	None	<i>Sub-issue EA Section 3.11.1.2.6</i>
<b>Effects to Recreational, Aesthetic, Spiritual, and Cultural Uses</b>	Minimal effect	Slightly more effect than under Alternative 1.	Slightly more effects than Alternatives 1 and 2, due to need for prolonged PDM. Increased effects by other entities.	Less effect by WS-Nevada, but increased effects by other entities.	No effect by WS-Nevada. Other entities, may have increased effects due to lack of obligation to consult or coordinate.	<i>Issue EA Section 3.12.3</i>
<b>Impacts to Native American Cultural Uses and Concerns</b>	Minimal to none.	More than Alternative 1.	More than Alternatives 2 and 3.	More than Alternatives 1, 2, and 3.	Likely more than Alternatives 1-4.	<i>Sub-issue EA Section 3.12.3.4</i>
<b>Consult with land manager and/or tribes prior to implementing PDM</b>	WS-Nevada would consult; other entities unlikely to consult.	WS-Nevada would consult; other entities unlikely to consult.	WS-Nevada would consult; other entities unlikely to consult.	WS-Nevada would consult; other entities unlikely to consult.	No PDM by WS; other entities unlikely to consult.	<i>Sub-Issue EA Section 1.8.3</i>

#### 14. Accomplishment of Goals and Objectives

Table 3-24 in Section 3.14 of the EA compares the ability and extent of each alternative to meet the program objectives. 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 goals 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-Nevada PDM is to meet the APHIS-WS mission of professionally supporting the coexistence of humans and wildlife. This goal was defined by 4 components (EA Section 1.5.2.1.2). WS-Nevada also developed objectives for implementing PDM to protect various resources and

evaluate impacts on the human environment. The EA cites these objectives throughout the document (Section 3.14), and WS-Nevada relied on them for the decision-making process. WS-Nevada evaluated the 5 alternatives for implementing PDM and considered the numerous related issues. We also evaluated the ability of WS-Nevada to implement PDM and achieve stated goals and objectives. Only Alternative 2, the Proposed Action met all objectives (Table 2).

Alternative 2 meets all of the EA's objectives for implementing PDM. Alternative 1 meets all but one objective. Under Alternative 1, WS-Nevada would not be able to respond to all losses or threats from predators (Objective 1), because WS-Nevada could not respond to requests for assistance from cooperators legally grazing livestock on allotments in WAs and WSAs. Alternative 3 fails at meeting the objective of reducing impacts of target and non-target populations because PDM activities would be prolonged due to the requirement of applying non-lethal methods even in situations where they are known to be ineffective. Alternative 3 also fails at meeting Objective 4, because it limits the tools that can be considered to alleviate damage, requiring a non-lethal approach be implemented first. Alternative 4 is unable to meet Objectives 1 and 4, while Alternative 5 fails to meet any of the objectives.

**Table 2. Summary of the Ability of Each Alternative to Meet WS-Nevada’s Objectives for PDM Implementation**

	<u>Alternative 1</u>	<u>Alternative 2</u>	<u>Alternative 3</u>	<u>Alternative 4</u>	<u>Alternative 5</u>
	No Action-Continue WS-Nevada IPDM Assistance Outside of Wilderness and Wilderness Study Areas	Proposed Action/Modified Current Program to Include IPDM in Wilderness and Wilderness Study Areas	Non-lethal IPDM Assistance before Recommending or Applying Lethal IPDM Assistance	Lethal IPDM Assistance Only for Human/Pet Safety	No WS-Nevada IPDM Activities
<b>Objective 1. Professionally and proficiently respond to all losses or threats due to predators, using the IPDM approach using the APHIS-WS Decision Model.</b>	Does not meet objective, due to exclusion of WAs or WSAs.	Meets objective	Does not meet objective because the WS-Decision Model cannot be fully executed	Does not meet objective for non-human or pet health and safety damage requests	Does not meet objective
<b>Objective 2. Implement IPDM so that cumulative effects do not negatively affect the viability of any native predator populations.</b>	Meets objective	Meets objective	Meets objective	Meets objective	Does not meet objective
<b>Objective 3. Ensure that actions conducted within the IPDM strategy fall within 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	Not applicable.
<b>Objective 4. Reduce impacts on target and non-target species populations by using the APHIS-WS Decision Model to select the most effective, target-specific, and humane remedies available, given legal, environmental, and other constraints.</b>	Meets objective	Meets objective	Does not meet objective.	Does not meet objective	Not applicable
<b>Objective 5. Incorporate the use of effective new and existing lethal and non-lethal technologies, where appropriate, into technical and direct assistance strategies.</b>	Meets objective	Meets objective	Meets objective	Meets objective	Does not meet objective
<b>Total Objectives Met</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>0</b>

## 15. Decision

I have carefully reviewed the EA and the input resulting from the public involvement process. I believe the need for action and issues identified in the EA would be best addressed through implementation of Alternative 2, the Proposed Action. Alternative 2 is selected because: (1) it offers the greatest chance at maximizing effectiveness and benefits to the broadest range of affected resources within current funding constraints; (2) it offers a balanced approach to the issues of humaneness, ethics, and recreational values, 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; (5) it will result in low to moderate magnitude of effects on predator populations, with moderate effects being short-term, localized, intentional, and in accordance with the direction of the USFWS or NDOW; 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 2 also enables WS-Nevada to maximize opportunities for tribal consultation and participation on 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 EA indicates that Alternative 2, 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 an Environmental Impact Statement (EIS) will not be prepared. This determination is based on consideration of the following factors:

- A. The proposed activities will occur in limited areas of Nevada, 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 Sections 3.10.1.5.2, 3.10.2.7.2, and 3.10.2.5.2). In some cases, PDM may be conducted to reduce risks to human health and safety caused by predators. No humans have been harmed in Nevada by WS-Nevada lethal PDM methods since 2003 (Section 3.10). WS-Nevada is not aware of any non-WS employees harmed in Nevada by its lethal PDM methods.
- C. The proposed activities will not have an impact on unique characteristics of the geographic area, such as historic or cultural resources (EA Section 3.3.5), park lands (EA Section 1.9.4.B), prime farmlands (EA Section 3.3.11), wetlands (EA Section 3.3.12), wild and scenic rivers (none exist in Nevada), or ecologically critical areas (EA Sections 1.9.4.B and 3.11). The nature of the methods proposed for removing predators do not significantly affect the physical environment. WS-Nevada consults with public land management agencies during development of 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-Nevada will conduct PDM in WAs or WSAs in accordance with applicable Memoranda of Understanding, the land-managing agency's approval and regulations, and any necessary Minimum Requirements Analyses (EA Section 3.11).

- D. The effects on the quality of the human environment of the proposed activities are not highly controversial. Although some people are opposed to 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 EA uses the best information available. This EA uses conservative population estimates and evaluates the upper limit of take to provide upper bounds on the impacts that might occur. Consultation and coordination with state and federal agencies with management responsibility for preserving sustainable populations of target and non-target species and ecosystems and project monitoring helps to ensure that program activities do not have significant unintended adverse impacts. Consultation and coordination with state and federal land management agencies during the annual work planning process ensures that potential adverse effects to recreation are also minimized. Recreational planners provide areas to avoid PDM based on usage, and NDOW provides times to avoid PDM to reduce conflicts with recreationists.
- 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. Management decisions made by WS-Nevada are based on the analysis in the EA and do not set a precedent for other APHIS-WS state decision-making. Management decisions made for each 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-Nevada will coordinate all PDM activities, including removal, with the applicable regulatory agency (*e.g.*, USFWS, NDOW, NDA, BLM, USFS) to help ensure cumulative impacts of WS-Nevada 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-Nevada predator take are not of significant duration, scope, or magnitude to result in sustained reductions in predator populations and associated potential for disruptions to trophic cascades. NDOW manages species under its authority for long term sustainable harvest. NDOW imposes harvest restrictions as necessary to meet approved management goals. Coyote harvest, while numerically large, has had no adverse effect on the Nevada population's sustainability (EA Section 3.5.3.4). There have been no threatened or endangered species taken or harmed by PDM activities in Nevada over the last 15 years (EA Section 3.6). WS-Nevada continues coordination with USFWS and NDOW to avoid take of threatened and endangered species and has completed Section 7 consultation for listed species in Nevada.
- 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-Nevada will engage in further consultation if it anticipates that responding to a PDM request will affect historic resources. WS-Nevada contacted all federally recognized tribes in the state during preparation, scoping, and review of this EA.

**For additional information regarding this decision, please contact Mark Ono, State Director, USDA-APHIS-Wildlife Services, 8775 Technology Way, Reno, NV 89521.**

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Michael Yeary  
Acting Director, Western Region  
USDA-APHIS-Wildlife Services

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Date