

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

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

**April 2021**

### **1. Introduction**

Wildlife in Washington 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. The 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 mammals in Washington. In Washington, 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 Washington (WS-Washington) prepared an Environmental Assessment (EA) evaluating the potential environmental impacts of alternatives for WS-Washington involvement in mammal damage management activities (MDM) in the state. We prepared the EA in consultation with the United States Bureau of Land Management (BLM), Washington Department of Fish and Wildlife (WDFW), the United States Forest Service (USFS), and United States Fish and Wildlife Service (USFWS). We have also completed Endangered Species Act consultations with the USFWS and the National Marine Fisheries Service (NMFS) for activities proposed in this EA. This Decision document provides notification of WS-Washington'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 mammals that threaten human health and safety, damage infrastructure and property, prey on or harass livestock and wildlife, damage other agricultural resources and property, or impact wildlife species of management concern in Washington. The mammal species in Washington included in the analysis are listed in Table 1 (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. Mammal Species Included in the Analysis**

Common Name		
BADGER	LION, MOUNTAIN	RACCOON
BATS	MARMOTS, YELLOW-BELLIED	RAT, NORWAY
BEARS, BLACK	MICE, DEER	RAT, BLACK
BEAVER	MOUSE, HOUSE	SEA LION, CALIFORNIA
BEAVER, MOUNTAIN	MINK	SEA LION, STELLER
BOBCATS	MOLES	SHREWS
CATS, FERAL/FREE RANGING	MUSKRAT	SKUNK, STRIPED
COYOTES	NUTRIA	SQUIRREL, DOUGLAS
DEER, BLACK-TAILED	OPOSSUM, VIRGINIA	SQUIRREL, EASTERN GRAY
DEER, MULE	OTTER, RIVER	SQUIRREL, FOX
DEER, WHITE-TAILED	PORCUPINE	SQUIRREL, GROUND, COLUMBIAN
DOGS, FERAL/FREE-RANGING	SQUIRRELS, GROUND, CALIFORNIAN	SQUIRREL, WESTERN GRAY
ELK	RABBITS, FERAL	SWINE, FERAL
FOX, RED	RABBITS, COTTONTAILS, EASTERN	VOLES
GOPHER, NORTHERN POCKET	RABBITS, COTTONTAILS, NUTTALL'S	WEASEL, LONG-TAILED

**3. Public Involvement**

On January 15, 2021, WS-Washington solicited public comment on alternatives and issues addressed in the Pre-decisional Draft of the 2020 EA: Mammal Damage Management in Washington. We received 993 submissions in response to the request for public comments. We considered all comments and responded to them in Chapter 5 of the EA. We will make this Decision and Finding of No Significant Impact (FONSI), and the Final EA, available to the public using the same methods for the Pre-decisional EA.

**4. Tribal Involvement**

On September 13, 2019, WS-Washington sent an invitation to all federally recognized tribes in Washington to participate in the development of the EA and to offer consultation. WS-Washington received phone calls from nine of the tribes inquiring about WS-Washington's proposed MDM activities. WS-Washington also mailed copies of the Agency Pre-Decisional Draft EA to all federally-recognized tribes on October 16, 2020. Although none of the tribes submitted comments on the Agency Pre-Decisional Draft EA, subsequent discussions with several of the tribes indicated support for WS-Washington and the proposed actions.

**5. Related Analyses**

This Decision and FONSI, and the final 2021 EA on MDM in Washington, will replace the 2008 EA for Reducing Aquatic Mammal Damage in Washington State and FONSI, the 1997 EA on Predator Damage Management In Washington, and the 2010 Summary Environmental Monitoring Review of the “Predator Damage Management in Washington” EA and Supplement to the EA and FONSI.

**6. Affected Environment**

Although the range and habitat used by individual species varies, at least some of the mammals 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-Washington would only conduct MDM

when requested by a landowner, affected resource owner or manager, land manager, or tribe, and only on areas where it has an established Work Initiation Document, Work Plan, or other comparable document. Upon receiving a request for assistance, WS-Washington could conduct MDM activities on federal, state, tribal, municipal, and private properties in Washington. WS-Washington will coordinate actions on public lands with the appropriate land 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.

WS-Washington will not conduct any MDM activities in the following land classifications in Washington; Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, Areas of Critical Environmental Concern, National Recreational Areas, National Conservation Areas, or National Monuments (EA Section 1.9.4.B and Appendix D). Those lands are excluded from the scope of this analysis, and any future requests for assistance of any type on those lands may be subject to additional National Environmental Policy Act (NEPA) documentation.

Almost half of WS-Washington's MDM activities occur on private lands, and the vast majority of its activities on federally and state managed public lands and properties are for the protection of health and human safety or threatened or endangered (T&E) species. Approximately 45% of the land in Washington is public land (i.e. managed by the county, state, or federal governments). An estimated 30% of WS-Washington's responses to mammal-human conflicts occur on federally-managed public lands, 26% of responses occurred on state-managed or municipal lands, while 42% of the responses to predator-human conflicts occur on private lands (EA Section 1.9.4, Table 3). An estimated 90% of WS-Washington's work on federally managed public lands is for the protection of human health and safety or T&E species (EA Section 1.8). Of the requests WS-Washington responded to on state-managed or municipal lands, 99.5% were for the protection of public resources such as airports, ports, or public utilities (dikes and dams).

## 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. Effects on Populations of Target Mammal Species – What might be the direct, indirect, and cumulative impacts of removing mammals on target predator populations?
2. Effects on Non-Target Species – What might be the direct, indirect, and cumulative impacts on non-target wildlife populations and ecosystems?
3. Effects on Endangered Species Act (ESA)-listed Threatened and Endangered Species – What might be the direct, indirect, and cumulative impacts on T&E species?
4. Potential for WS-Washington MDM Activities to Contribute to or Cause Ecological Trophic Cascades – How would the alternatives impact trophic cascades, biodiversity, and ecosystem resilience? Does the proposed MDM 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?
5. Humaneness and Ethics Related to MDM – 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?

6. Impacts to Sociocultural Wildlife Values and Wildlife-related Recreation—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 MDM, 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 damage management actions for each alternative?
7. Potential Effects of MDM Methods on the Environment and Their Risks to Human/Pet Health and Safety - What are the potential risks and benefits of MDM methods to human and pet health and safety?

We considered 9 additional issues in the EA, but we did not analyze them in detail, as explained in Section 3.2 of the EA. WS-Washington’s responses to additional issues raised during the comment period for the EA are addressed in the Responses to Comments in Chapter 6 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 4 alternatives to address the 7 primary issues identified. We considered, but did not analyze, 17 additional alternatives (EA Section 2.4). The following is a summary of the damage management alternatives considered in detail in the EA. Section 2.2 of the EA summarizes each alternative and Chapter 3 provides analysis and comparison of the potential effects of each alternative.

### **Alternative 1: No Action Alternative – Continue the Current MDM Activities**

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

WS-Washington personnel implement or recommend effective non-lethal and/or lethal damage management 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-Washington will continue to respond to requests for assistance by:

- Taking no action if warranted;
- Providing non-lethal and/or lethal MDM technical assistance to property owners or managers on actions they could take to reduce damage caused by mammals; or
- Providing non-lethal and lethal operational MDM assistance and, when appropriate, technical assistance to a property owner or manager.

WS-Washington 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 mammal damage.

Under this alternative, methods used could include a variety of frightening devices, ground shooting, aerial MDM, denning, various trap devices, and foot snares (EA Appendix A). WS-Washington is not proposing use of M-44s under this or any other alternative. WS-Washington will conduct work on federally-managed public lands in accordance with relevant MOUs (Section 1.8.2).

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

### **Alternative 2: WS-Washington Provides Technical Assistance and Non-lethal Operational Damage Management Only**

WS-Washington would provide non-lethal and lethal recommendations and information for others to implement the methods themselves, but WS-Washington would only operationally engage in non-lethal MDM activities.

This is similar to Alternative 1 (No Action), except that WS-Washington would not be available to directly provide any lethal operational damage management assistance to any requester, even if requested as an agent of WDFW or USFWS. Requestors may conduct MDM activities on their own, but would be dependent on commercial companies, WDFW, USFWS, or volunteers/family/friends when they require assistance with lethal MDM responses.

In some cases, WS-Washington 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 propane cannons. Generally, under this alternative, WS-Washington could describe 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-Washington could implement recommended methods, use other lethal and non-lethal methods not recommended by WS-Washington, seek assistance from other entities, or take no further action. While WS-Washington could recommend non-lethal and lethal methods, WS-Washington 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 any environmental compliance responsibilities to the resource owner, other governmental agencies, and/or private businesses. Section 2.2.1.8 of the EA discusses what other entities may be available to conduct MDM in cases where WS-Washington 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-Washington Only Provides Lethal MDM Assistance for Cases of Human/Pet Health or Safety and/or to Protect Threatened or Endangered Species.**

Under this Alternative, WS-Washington would provide full MDM technical assistance, including providing recommendations and guidance to the requestor on implementation of lethal and non-lethal methods, and non-lethal operational MDM, but would only provide lethal operational MDM assistance for protecting human/pet health or safety or to protect ESA-listed species. WS-Washington would respond to all other requests for operational damage management with non-lethal methods. For instances of human/pet health or safety or to protect ESA-listed species, all

lethal and non-lethal MDM methods described in Appendix A of the EA are available for recommendation and/or use.

#### **Alternative 4: No WS-Washington Involvement in MDM Activities**

Under this alternative, WS-Washington would not be involved in any MDM efforts, including lethal and non-lethal technical assistance, or operational damage management actions. Other legally-authorized entities could implement MDM, such as WDFW, USFWS, property owners, wildlife control operators (WCO) (excludes big game unless authorized under special permits), other commercial MDM companies for non-wildlife species, hunters, family members, and certified WDFW volunteers (EA Sections 1.7 and 2.4). Entities experiencing mammal damage could continue to resolve damage by employing whatever methods they chose. The removal of mammals to alleviate damage or threats would occur despite the lack of involvement by WS-Washington. Section 2.2.1.8 of the EA discusses what other entities may be available to conduct MDM in cases where WS-Washington cannot respond to requests for assistance.

Requesters would need to seek MDM information on existing and new methods (including methods developed and tested by the APHIS-WS NWRC) from sources such as WDFW, University Extension Service offices, conservation districts, or pest control companies. Legal limitations on MDM implemented by entities other than WDFW may limit the options available to requestors experiencing damage. WDFW only provides direct wildlife damage management assistance in limited situations but does provide technical assistance within available resources and issues depredation permits as appropriate. Individuals and land management agencies have the option of implementing lethal MDM measures on their own, through WDFW conflict staff, by hunters or their friends/family, or through WDFW authorized WCOs. WDFW's actions are subject to State Environmental Policy Act (SEPA) analysis and ESA consultations. 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-Washington will monitor program activities annually to determine whether the analyses and determinations in the EA adequately address current and anticipated future activities, and whether there is new information that warrants supplementing or replacing the EA. Under the Proposed Alternative, WS-Washington will provide data to all applicable natural resource management agencies (including WDFW, USFWS, BLM, and USFS) on the take of target and non-target animals. The data will help monitor the cumulative impact 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. All studies and publications provided to us have been reviewed and incorporated in the final EA, where applicable.

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

WS-Washington 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-Washington MDM under the alternatives. Key clarifications and additions are:

- Section 1.5.5 – Added this section to describe how WS-Washington works to assist in conservation and restoration efforts related to the EA, including beaver, invasive species, and non-lethal predator management;
- Added information on black bear population estimates for Washington state;
- Included information on wolverines in Section 3.5;
- Updated citations related to trapping Best Management Practices to reflect updates from 2020;
- Added information on enclosed foothold traps in Appendix A;
- Added information to the discussion of humaneness of methods in Sections 3.8.5.1.4 and 3.8.5.1.5 on foothold traps and quick kill traps;
- Added information related to informal consultation related to the effects of chlorophacinone on Northern spotted owl (EA Sections 3.6.4.10 and 3.8.5.2.4);
- Clarified exclusion of ecologically sensitive areas, such as Wilderness Areas, from the proposed action in Section 1.9.4.B and Appendix D; and
- General formatting and grammatical edits.

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

In order to conduct efficient and effective MDM and stay aware of new information, WS-Washington used the best available data and information from wildlife agencies having jurisdiction by law (WDFW and USFWS; 40 CFR § 1508.15), 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 MDM strategies and tools, and discuss ecological impacts.

## **13. Review of Alternatives**

The EA conducted a detailed analysis of the alternatives based on the issues identified in Section 3.1. 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 highlighted here.

After reviewing the EA and carefully evaluating all alternatives, WS-Washington 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 MDM strategies that accommodate resource owner/manager objectives and minimize the risk of adverse impacts on the human environment.

The restrictions on WS-Washington's ability to use any strategy or combination of methods to alleviate human-wildlife conflicts under Alternatives 2, 3, and 4 could result in less effective and less environmentally responsible resolution of MDM issues, as described in Section 3.6.5.2-4, 3.7.3.2-4, 3.8.6.2-4, 3.9.2-4 of the EA, and throughout Section 3.10 of the EA. Non-WS entities may provide MDM (EA Sections 2.2.1.8 and 3.3.2), but there is large variability in the quality of the services and the accountability to the public. Should WS-Washington be unable to provide MDM, some level of MDM would likely be available to those experiencing damage, and WS-Washington has analyzed the effects of reasonably foreseeable non-WS participation. Section 3.3 of the EA discussed and compared how other entities may meet the need for MDM when WS-Washington is limited or absent.

### **Impacts to Target Species (EA Section 3.4)**

The EA indicates that WS-Washington'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-Washington's analysis of impacts on target species is predicated on conservative estimates of population size which results in an overestimation of impacts or the proposed actions<sup>1</sup>. WS-Washington'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-Washington (lethal take only for the protection of T&E species and human safety) than Alternative 2 (WS-Washington provides only non-lethal assistance). Under Alternative 2, WS-Washington would only use non-lethal methods operationally, and under Alternative 4, WS-Washington would not conduct any MDM, resulting in no lethal take by WS-Washington. While Alternative 1 has the highest anticipated level of lethal take by WS-Washington, 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-Washington and non-WS entities will be similar across all alternatives. Under Alternative 1, WS-Washington 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 Alternative 2, where WS-Washington cannot provide lethal assistance, we anticipate that cumulative lethal take will remain similar to Alternative 1 because WS-Washington will continue to help people resolve problems using non-lethal methods and they will still have to seek lethal remedies if those efforts are not successful. The difference between Alternatives 1 and 2 is primarily who provides the lethal management because landowners, private wildlife control operators, and WDFW are capable of providing lethal MDM if WS-Washington cannot provide it. Under all alternatives, we expect that non-WS entities will provide MDM assistance if WS-Washington is not available (EA Sections 2.2.1.9 and 3.3.1), however other entities are not required to report all take to WDFW or conduct NEPA analyses and ESA consultations on their actions. Table 43 (EA Section 3.4.41) provides a conservative projection of lethal take by all entities for species included in the EA, based on information reported to WDFW.

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

We have concluded that all four alternatives have low risks and impact potential to non-target species. Under Alternatives where WS-Washington does not provide the full range of MDM assistance to all requestors (Alternatives 2-4), non-WS entities may conduct MDM and do not have the same skill levels, equipment, experience, or obligations under NEPA. Under these Alternatives, there is likely to be slightly greater or unreported impacts to non-target mammal species (EA Section 3.5.1.2, 3.5.1.3, 3.5.1.4). WS-Washington took an average of 9 non-target animals per year during MDM activities, which is approximately 0.91% of the average annual WS-Washington lethal take total for MDM activities in the state (EA Section 3.5). This shows a high level of selectivity in the application of MDM strategies and methods by WS-Washington personnel. WCOs and landowners are often

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<sup>1</sup> In order to further ensure the most conservative estimates for impacts on target take, WS-Washington presented the lowest maximum sustainable harvest level available from peer-reviewed literature in the EA. WS-Washington's take, as well as cumulative take, for each species are compared against this number in Section 3.4 of the EA. For species where there was not a published maximum sustainable harvest, WS-Washington used other metrics to determine effects on the populations.



legally authorized to conduct their own lethal MDM (EA Section 3.3.1). WDFW has trained biologists capable of responding to incidents in which private individuals and WCOs may not be authorized or trained. However, landowners generally do not have training or skills to safely and efficiently use a wide range of MDM methods. Although it is not possible to anticipate exactly how many additional non-target animals would be taken by non-WS-Washington entities, it is assumed that non-target take would remain low relative to their populations. The mammal species in this EA are generally resilient and cumulative take is below the current annual maximum sustainable harvest level (Section 3.5), therefore the impacts to populations of non-target animals under Alternatives 2-4 could exceed those of Alternative 1, but still would not be significant.

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

WS-Washington has no records of taking any state listed threatened or endangered species or federally listed ESA species. WS-Washington completed ESA consultations under Section 7 with USFWS and NMFS for activities in the EA, ensuring there will not be significant effects to those species. These consultations and the protective measures associated with them apply to WS-Washington MDM activities under Alternatives 1-3 (Alternative 4 is no WS-Washington MDM). Non-WS entities are not 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 - 4 present a greater risk to both state-listed and ESA-listed threatened and endangered species than Alternative 1.

### **Ecological Trophic Cascades (EA Section 3.7)**

WS-Washington's mission is to reduce damage or threats caused by mammals, 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 native species' populations. WS-Washington does not strive to eliminate native mammal 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 3.7 of the EA, impacts on mammal 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-Washington's proposed action under Alternative 1 is not of sufficient magnitude or scope to result in ecosystem-level shifts or trophic cascades. The EA discusses trophic cascades extensively in Section 3.7, and Appendix F, and addresses public comments specific to this issue in Section 5.25.

### **Ethics and Humaneness (EA Section 3.8)**

In Section 3.8.6 of the EA, WS-Washington evaluated MDM methods for humaneness, specifically evaluating how humane MDM conducted under each alternative, by any entity, is reasonably foreseeable to be. The analysis in Section 3.8.6 of the EA determined that Alternative 1 is likely to be the most humane, with Alternatives 2-4 being less humane/ethical corresponding to the amount of MDM that would likely be conducted by less skilled, non-WS personnel under each. We based this determination largely on the professional skills and commitment of the APHIS-WS to humaneness (WS Directive 1.301) that are less likely to be consistently replicated by non-WS entities. The EA discussed perspectives on humaneness and ethics related to predator damage management, and it evaluated each MDM 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.

### **Sociocultural Concerns (EA Section 3.9)**

Implementation of MDM on any scale has the potential for creating short-term, localized, seasonal disturbance of sociocultural resources on public lands. Alternative 1, however, minimizes the impacts because WS-Washington coordinates with land management agencies and tribes to minimize a disturbance on a case-by-case basis. Alternatives that reduce the availability of WS-Washington to provide MDM (Alternatives 2-4) assistance will increase non-WS entity involvement in MDM (EA Sections 2.2.1.8 and 3.3). Private individuals are not required to coordinate with land management agencies, tribes, or WDFW to reduce exposure to the public viewing or recreational activities and may pose more of a risk to sociocultural resources.

In Alternative 1, WS-Washington's involvement in MDM provides the most 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 are not obligated to invite public comment on their actions. Further, unlike non-governmental entities, APHIS-WS has a trust responsibility to federally-recognized tribes, which includes government-to-government relationship, consultation, and coordination. Alternative 1 offers the greatest opportunities for tribal input and consultation on MDM because WS-Washington conducts MDM in accordance with APHIS Directive 1040.3, "Consultation with Elected Leaders of Federally Recognized Indian Tribes." Alternatives 2-4 diminish the opportunities for tribal involvement because non-WS entities do not have the same obligations to federally-recognized tribes as federal agencies.

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

We have determined that none of the alternatives have a significant impact on the environment (soil, water, and terrestrial and aquatic species) or human and pet safety. Alternatives that limit WS-Washington's involvement in MDM (Alternatives 2-4) may result in increased MDM by less skilled non-WS entities, which could result in increased adverse effects compared to Alternative 1, the Proposed Alternative.

Risks to human health and safety from WS-Washington's actions were determined to be low under all the alternatives. The EA analyzed the potential effects of MDM methods on the environment and public safety by dividing the methods into 3 categories – mechanical/physical capture devices, chemical methods, and lead ammunition, and we found each of them to have low impact on environmental resources and human pet safety in all of the alternatives. WS-Washington adheres to a variety of protective measures, which further reduces risks to humans and the environment from these methods, as described in EA Section 2.3. All methods proposed are available to non-WS entities in some capacity (EA Table 11, Section 2.2.5). Therefore, risks may be slightly higher for alternatives that increase the amount of MDM that may occur by non-WS entities.

**Table 2. Environmental Issues and Needs for Action Compared for Each Alternative<sup>2</sup>**

<b>Issues</b>	<b>Alternative 1 Proposed Action/No Action-Continue WS- Washington MDM Activities</b>	<b>Alternative 2 Technical MDM Assistance and Non- lethal Operational Damage Management Activities</b>	<b>Alternative 3 Lethal MDM Assistance Only for Human/Pet Safety or to Protect T&amp;E Species</b>	<b>Alternative 4 No WS-Washington MDM Activities</b>	<b>Subject Matter and EA Section Reference</b>
<b>WS-Washington's Ability to Participate in Research</b>	High participation by WS-Washington	Limited participation dependent on study design/requirements	Limited participation dependent on study design/requirements	No participation	<i>Purpose and Need  EA Section 1.5</i>
<b>WS-Washington's Ability to Provide Education and Technical Assistance</b>	Full assistance available	Full assistance available	Full assistance available	No ability	<i>Purpose and Need  1.5.3</i>
<b>Effects of MDM on Mammal Species Populations in Washington</b>	Little to no impact by WS-Washington.	Little to no impact by WS-Washington; increased impact by other entities because of WS unavailability.	Little to no impact by WS-Washington; increased impact by other entities because of WS unavailability.	No impact by WS- Washington; increased impacts by other entities in place of WS- Washington.	<i>Issue  EA Section 3.4</i>
<b>WS-Washington's Proposed Take of Coyotes  (60% threshold would affect the population)</b>	Analyzed <sup>3</sup> annual take of up to 2.18% (2,000 coyotes) of the statewide coyote population, WS- Washington is unlikely to take that many.	No lethal take by WS- Washington.	Likely a slight decrease in WS-Washington take when compared to Alternative 1.	No take by WS- Washington.	<i>Sub-issue  EA Section 3.4.18</i>
<b>WS-Washington's Proposed Take of Cougar  (30% threshold would affect the population)</b>	Analyzed annual take of up to 0.43% (10 lions) of the statewide mountain lion population.	No lethal take by WS- Washington.	Likely the same as Alternative 1 because WS-Washington is only likely to be requested to remove cougar for human health and safety.	No lethal take by WS- Washington.	<i>Sub-issue  EA Section 3.4.4</i>

<sup>2</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>3</sup> Analysis of annual take for all species in the EA represents an over-estimated amount of take, and WS-Washington is unlikely to reach the estimated level. The effect of this level of take is based on conservative population estimates.

<b>WS-Washington's Proposed Take of Beaver (20% threshold would affect the population)</b>	Analyzed annual take of up to 1.45% of the beaver population per year, (1,000 beaver per year). Lethal beaver take by WS-Washington further limited by terms of ESA consultation with NMFS. WS-Washington would be able to participate in beaver relocation efforts for stream restoration and recovery of ESA listed salmonids.	No lethal take by WS-Washington. WS-Washington may continue to participate in beaver relocation efforts.	Take similar to Alternative 1 because of beaver-related threat impacts to human safety and ESA-listed salmonids. Participation in beaver relocation efforts could continue.	No lethal take by WS-Washington, and no participation in beaver trapping and relocation efforts for stream restoration.	<i>Sub-issue EA Sections 2.3.D and 3.4.10</i>
<b>WS-Washington Assistance with Beaver Relocation and Instream Beaver Damage Mitigation</b>	Allowed	Allowed	Allowed, but instances where beaver may be acquired for relocation would be limited under this Alternative.	Not Allowed.	<i>EA Section 1.5.5</i>
<b>Effects of MDM on Non-target Species</b>	Minimal effect	Similar to Alternative 1, but because WS-Washington would not be engaged in lethal take effects may be even less. However, increased use of lethal MDM methods by non-WS entities may increase risks to non-targets	Similar to Alternative 1. However, increased use of lethal MDM methods by non-WS entities may increase risks to non-targets	No non-target take by WS-Washington. All MDM would be conducted by non-WS entities which would increase risks to listed species, especially protected salmonids. <sup>4</sup>	<i>Issue EA Section 3.6</i>
<b>Effects of MDM Activities on ESA-listed Species</b>	Minimal effect by WS-Washington, moderate risk by other entities	Minimal effect by WS-Washington, moderate risk by other entities	Minimal effect by WS-Washington, moderate risk by other entities	Lowest effect by WS-Washington, highest risk by other entities	<i>Issue EA Section 3.7</i>

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<sup>4</sup> WS-Washington completed ESA Section 7 consultation with NMFS in 2018. The consultation established guidelines and limitations on lethal removal of beaver that are not in effect for non-WS entities. The EA discusses the NMFS consultation in Section 3.6.4.1. WS-Washington has increased participation in beaver relocation programs since 2018, facilitated by tribes and WDFW.

<b>Likelihood of Implementation of MDM Causing a Trophic Cascade or Affecting Biodiversity</b>	Highly unlikely.	Unlikely, but greater risk than Alternative 1. Non-WS entities may increase impacts to sensitive environments, such as salmonid habitat.	Less than Alternative 2, but slightly more risk to biodiversity than Alternative 1.	Slightly more likely than other Alternatives due to the lack of WS-Washington's federal leadership in protecting ESA-listed species and supporting salmon habitat recovery efforts.	<i>Issue EA Section 3.8</i>
<b>Effects of MDM on Humaneness and Ethics</b>	WS-Washington adheres to high standards of humaneness and ethics in accordance with applicable laws, American Veterinary Medical Association, and Association of Fish and Wildlife Agencies guidelines.	Same standards under Alternative 1, but more MDM conducted by non-WS entities may decrease humaneness.	WS-Washington would continue to uphold the same standards as under Alternatives 1 and 2. Moderate effect from other entities.	All MDM would be conducted by non-WS entities with potential increased impact to humaneness over Alternatives 1-3.	<i>Issue EA Section 3.8</i>
<b>Effects of WS-Washington's Use of Methods on the Environment (soil, water, aquatic and terrestrial organisms)</b>	Little to no effect from WS-Washington activities.	Same as Alternative 1	Same as Alternative 1.	No effects.	<i>Issue EA Section 3.10</i>
<b>Effects of Use of Mechanical Methods on the Environment</b>	Little to no effect from WS-Washington activities.	Same as Alternative 1.	Little to no effect from WS-Washington activities. Moderate effect by other entities.	Less effect than Alternatives 1, 2 and 3. Highest effect by other entities.	<i>Sub-issue EA Section 3.10.1</i>
<b>Effects of Use of Lead Ammunition on the Environment</b>	Negligible impact, as WS-Washington uses non-lead ammunition for the majority of MDM activities, including aerial shooting.	Greater risk, as other entities may or may not use non-lead ammunition.	Slightly less risk than Alternative 2, but greater risk than Alternative 1, due to increased MDM by non-WS entities.	Greatest risk, as all MDM activities would be conducted by non-WS entities.	<i>Sub-issue 3.10.3</i>
<b>Effects of Use of Chemical Methods on the Environment</b>	Low to negligible.	Less risk than Alternative 1, as non-WS entities do not have access to the same range of chemical methods as WS-Washington.	Slightly less than Alternatives 1 and 2.	Less than Alternatives 1, 2 and 3.	<i>Sub-issue EA Section 3.10.4</i>
<b>Risks of WS-Washington's MDM to Safety of Recreation</b>	Very Low on private lands, effects unlikely on public lands due to very limited work on public lands used for recreation.	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.	<i>Issue EA Section 3.10</i>

<b>Effects of Use of Mechanical Methods on Public Health and Safety</b>	Little to no effect from WS-Washington activities.	Little to no effect from WS-Washington activities. Moderate effect by other entities.	Little to no effect from WS-Washington activities. Moderate effect by other entities.	No effect from WS-Washington. Highest effect by other entities.	<i>Sub-issue EA Section 3.10.1</i>
<b>Effects of Use of Lead Ammunition on Public Health and Safety</b>	Low to Negligible.	Slightly less than Alternative 1. Potentially moderate effect by other entities.	Slightly less than Alternatives 1 and 2. Potentially moderate effect by other entities.	WS-Washington's effects on humans and domestic animals would be less than Alternatives 1, 2 and 3. Highest effect by other entities.	<i>Sub-issue 3.10.2</i>
<b>Effects of WS-Washington's Use 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.	<i>Sub-issue EA Section 3.10.3</i>
<b>Use of Aerial MDM on Public Lands</b>	Possible, but not common by WS-Washington.	Unlikely, but possible by other entities.	Unlikely, but possible by other entities.	Unlikely, but possible by other entities.	<i>Sub-issue EA Section 2.3</i>
<b>Effects of MDM Activities on Recreational, Aesthetic, Spiritual, and Cultural Uses</b>	Minimal effect	Slightly more effect than under Alternative 1.	Slightly more effect than Alternative 2, due to need for prolonged MDM. Increased effects by other entities.	Less effect by WS-Washington, but highest effects by other entities.	<i>Issue EA Section 3.9.2</i>
<b>Impacts of MDM on Native American Cultural Uses and Concerns</b>	Minimal to none from WS-Washington's activities. Per APHIS policy, WS-Washington offers consultation opportunities to tribal governments.	Less than Alternative 1 for WS-Washington activities, but MDM by non-WS entities could increase impacts to levels greater than Alternative 1 due to lack of coordination.	Less than Alternatives 1 and 2 for WS-Washington's activities, but more than Alternatives 2 and 3 by non-WS entities due to lack of coordination.	No impacts by WS-Washington. More than Alternatives 1, 2, and 3 by non-WS entities due to lack of coordination.	<i>Sub-issue EA Section 9.9.2.1.34</i>
<b>Impacts of WS-Washington's MDM on Wilderness and Wilderness Study Areas</b>	No effect.	No effect.	No effect.	No effect.	<i>EA Section 1.9.4.B</i>

## 14. Accomplishment of Goals and Objectives

Table 47 in Section 3.11 of the EA compares the ability and extent of each alternative to meet the objectives defined in EA Section 1.5.1. 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 MDM.

The goal of WS-Washington is to respond in a timely and appropriate way to all requests for assistance (EA Section 1.5.1). WS-Washington also developed objectives for implementing MDM 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 3.11. WS-Washington relied on this comparison as part of the decision-making process. WS-Washington evaluated the 4 alternatives for implementing MDM 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-Washington to implement MDM and achieve stated goals and objectives. Only Alternative 1, the Proposed Action, met all objectives (Table 2).

Alternative 1 meets all the EA's objectives for implementing MDM. Under Alternative 2, WS-Washington would not be able to use the Decision Model to develop a strategy or select methods for managing mammal damage where non-lethal methods are unlikely to be successful. Alternative 3 does not meet all objectives because WS-Washington would only be allowed to use the Decision Model to apply integrated MDM in certain situations. Alternative 4 fails to meet any of the objectives.

**Table 3. Summary of the Ability of Each Alternative to Meet WS-Washington's Objectives for PDM Implementation**

<b>Alternative 1 Proposed Action/No Action-Continue WS- Washington MDM Activities</b>	<b>Alternative 2 Technical MDM Assistance and Non- lethal Operational Damage Management Activities</b>	<b>Alternative 3 Lethal MDM Assistance Only for Human/Pet Safety or to Protect T&amp;E Species</b>	<b>Alternative 4 No WS-Washington MDM Activities</b>
<b>Objective 1. Professionally and proficiently respond to all requests for assistance using the APIHS-WS Decision model to apply MDM. MDM must be consistent with all applicable federal, state, and local laws, APHIS-WS policies and directives, cooperative agreements, MOUs and other requirements as provided in any decision resulting from this EA.</b>			
Meets objective.	Does not meet objective.	Does not meet objective	Does not meet objective
<b>Objective 2. Implement MDM so that cumulative effects do not negatively affect the viability of any native mammal populations.</b>			
Meets objective.	Meets objective	Meets objective	Meets objective.
<b>Objective 3. Ensure that actions conducted within the MDM 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	Does not meet objective.
<b>Objective 4. Minimize impacts on target and non-target species populations by selecting the most effective, target-specific, and humane methods available, given legal, environmental, and other constraints.</b>			
Meets objective.	Does not meet objective.	Does not meet objective.	Does not meet objective.
<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.	Does not meet objective.	Does not meet objective	Does not meet objective.

## 15. Decision

I have carefully reviewed the EA and the input resulting from agency review and the public involvement process. I find that Alternative 1, the Proposed Action, best addresses the need for action and issues identified in the 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 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 magnitude of effects on mammal populations, with moderate effects being short-term, localized, intentional, and in accordance with the direction of the WDFW or USFWS; and, (6) impacts on target mammal 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 MDM 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 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 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 Washington, 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. MDM methods are target specific and are not likely to adversely affect human health and safety (EA Sections 3.10.1.1.2, 3.10.1.2.2, and 3.10.1.3.4). In some cases, WS-Washington may conduct MDM to reduce risks to human health and safety caused by mammals. WS-Washington is not aware of members of the public harmed in Washington by MDM 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 3.9.2.1), park lands (EA Section 1.9.4.C), prime farmlands (EA Section 3.2), wetlands (EA Section 3.7.2.1.1), wild and scenic rivers (1.9.4.B), or ecologically critical areas (EA Sections 1.9.4.B and 3.11). The nature of the methods proposed for removing mammals do not significantly affect the physical environment. WS-Washington has consulted with public land management agencies during development of this EA. We will continue to consult with them on work plans to identify sensitive areas and times when MDM 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.



- D. Data contained in the EA (Sections 3.4, 3.5, 3.6, and 3.9) makes clear that the number of mammals taken by WS-Washington will not have a significant impact on target mammal populations, preserving an abundance of mammals for future viewing enjoyment. 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 MDM, the methods and impacts of MDM are not controversial among experts in the field of managing wildlife conflicts (EA Section 1.10.1.1).
- 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 1.10.1.2). 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. Even when using conservative population estimates and overestimates of potential take, the analysis showed that WS-Washington MDM will not result in significant impacts to any species. 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 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-Washington 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-Washington makes management decisions based on the analysis in the EA, and it does not set a precedent for other APHIS-WS state decision-making. 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 MDM services requested and authorized by state and local (*e.g.*, county) management entities.
- G. This EA does not identify any significant cumulative effects. WS-Washington will coordinate all MDM activities, including removal, with the applicable regulatory agency (*e.g.*, USFWS, WDFW, BLM, USFS) to help ensure cumulative impacts of WS-Washington'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-Washington's mammal take are not of significant duration, scope, or magnitude to result in sustained reductions in predator populations and associated potential for trophic cascades. WDFW manages species under its authority for long term sustainable harvest. WDFW imposes harvest restrictions as necessary to meet approved management goals. Coyote harvest, while numerically large, has had no adverse effect on the Washington population's sustainability (EA Section 3.5.3.4). WS-Washington MDM activities have not resulted in take or harm of any threatened or endangered species over the last 15 years (EA Section 3.6). WS-Washington continues coordination with USFWS and WDFW to avoid take of threatened and endangered species and has completed Section 7 consultations with USFWS and NMFS for listed species in Washington.
- 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, MDM does not have the potential to affect historic resources. WS-Washington will engage in consultation if it anticipates that responding to a MDM request will affect historic resources. WS-Washington contacted all federally recognized tribes in the state during preparation, scoping, and review of this EA. Tribes were invited to participate in the EA process and were provided the Agency Draft EA to review. None of the tribes submitted formal comments, but discussions with several of the tribes indicated support for WS-Washington and the proposed actions.

**For additional information regarding this decision, please contact Mike Linnell, State Director, USDA-APHIS-Wildlife Services, 720 O’Leary St NW, Olympia, WA 98502.**

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

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Date