

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

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

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1 Introduction

Wildlife in Oregon is an important part of the social fabric that comprises the human environment. Abundant wildlife populations interact with the 4.24 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. Semiaquatic mammals in Oregon include beaver, nutria, muskrat, mink and river otters and provide many positive ecological, cultural, economic, and aesthetic benefits. However, they may also be involved in conflicts, including threats to human health and safety, property damage, agriculture damage, and degradation of natural resources. As human populations expand and more land is used for human needs, there is an increased potential for conflicts between semiaquatic mammal and human interactions.

United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service, Wildlife Services (APHIS-WS) responds to requests from individuals, organizations, and agencies experiencing damage caused by semiaquatic mammals in Oregon. APHIS-WS's program in Oregon (WS-Oregon) 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.

WS-Oregon prepared the Environmental Assessment (EA) titled *Semiaquatic Mammal Damage Management in Oregon* to evaluate the potential environmental impacts of alternatives for WS-Oregon's involvement in semiaquatic mammal damage management activities (SMDM) in the state. The Oregon Department of Fish and Wildlife (ODFW) and the U.S. Forest Service (USFS) were cooperating agencies in the preparation of the EA. WS-Oregon also consulted with the Bureau of Land Management (BLM), and the U.S. Fish and Wildlife Service (USFWS) on the preparation of the final EA. WS-Oregon also completed Endangered Species Act (ESA) consultations with the USFWS and with the National Oceanic and Atmospheric Administration, National Marine Mammal and Fisheries Service, (NMFS or NOAA Fisheries) for activities proposed in the EA.

WS-Oregon's decision is to select Alternative 1, the Preferred Alternative, where WS-Oregon implements an adaptive integrated approach utilizing non-lethal and lethal techniques (EA Appendix D), identified through use of the APHIS-WS Decision Model (EA Section 2.3.2), to reduce damage and threats caused by semiaquatic mammals anywhere in Oregon.

2 Purpose and Need

The purpose of the proposed action is to respond to requests for assistance from any entity requesting assistance with semiaquatic mammal damage throughout Oregon. Section 1.2 of the EA describes in detail the Need for Action and the resources that may be affected, threatened, or damaged by semiaquatic mammals in Oregon, including human safety, property, agriculture, and natural resources.

The EA anticipates future requests for assistance and potential SMDM activities based on data from FY13-FY17¹. The primary need for SMDM in Oregon has been, and is anticipated to be, the need to protect infrastructure such as roads and railroads (EA Section 1.2.4, Table 2). The EA accounts for the various needs to protect roads and structures which may be damaged to a point to that may threaten human safety, protecting other property, agriculture, or natural resources. The EA also evaluates the alternatives' ability to promote APHIS-WS' mission of promoting coexistence through the use and development of non-lethal methods and participation in research to improve the humaneness of methods for managing conflicts (EA Table 16).

3 Public Involvement

The pre-decisional EA was made available for public comment for 38 days, from April 30 – June 7, 2024, on Regulations.gov (Docket APHIS-2024-0024). We received 8,145 submissions in response to the request for public comments. All comments were considered and addressed in the body of the EA and/or in Appendix J. 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.

4 Tribal Involvement

As discussed in Section 1.6, WS-Oregon conducts consultation and coordination with tribal governments consistent with Executive Order (EO) 13175 and APHIS Directive 1040.3. WS-Oregon mailed invitations for formal government-to-government consultation and participation in the EA as a Cooperating Agency to all federally-recognized tribes in Oregon and the Nez Perce tribe on August 31, 2021. No tribes responded to this invitation or commented on the EA during public comment. However, based on previous consultations and communications, WS-Oregon understands and acknowledges that wildlife, lands, and ecosystems hold significant importance to tribal members and communities individually and collectively. WS-Oregon will continue to be available for government-to-government consultation with any tribe, if requested.

5 Affected Environment

Although the geographic range and habitat used by semiaquatic species varies in Oregon, semiaquatic mammals are present throughout Oregon, where suitable habitat exists. Consequently, damage or threats of damage caused by the species addressed in the EA could occur anywhere in the state but are only likely to occur where these species overlap with humans (e.g. not in remote, uninhabited areas). WS-Oregon would only conduct SMDM when requested or agreed to by a landowner or manager after a Work Initiation Document (WID), Work Plan, or other comparable document has been signed. If requested by the landowner/manager, SMDM activities could be conducted on federal, state, tribal, municipal, and private. WS-Oregon will coordinate actions on public lands with the appropriate management agency, and its actions will be consistent with applicable land and resource management plans. Any SMDM requested of WS-Oregon on public lands will be evaluated on a site-specific basis

¹ The FY13-FY17 date range was chosen to represent the most recent time period where WS-Oregon implemented the full range of SMDM activities, as proposed in Alternative 1. During FY17-FY24, WS-Oregon reduced SMDM activities while ESA consultations were conducted.

and only conducted as approved by the land management agency after review to ensure consistency with land management goals and policies.

Approximately 43% of the land in Oregon is public (meaning the county, state, or federal governments manage them). An estimated <1% of WS-Oregon's responses to semiaquatic mammal-human conflicts occurred on federally managed lands, 5% of responses occurred on state-managed lands, 42% of responses occurred on county or city land, 2% occurred on other public land, while 51% of the responses to SMDM-human conflicts occur on private lands. WS-Oregon's responded to only 2 instances of SMDM on federal lands, both to protect salmonids in a federal fish hatchery. Of the requests WS-Oregon responded to on county or municipal lands, 48% were for the protection of public resources such as airports or public infrastructure (dikes and dams).

WS-Oregon does not anticipate receiving requests to conduct SMDM in wilderness areas, wilderness study areas, or other Special Designated Areas (SDA, EA Section J.15). These requests are expected to be rare because the management and conditions of SDAs minimize the potential for human wildlife conflicts. SDAs are typically managed to protect their natural condition and minimize the effects human presence, which generally precludes conflicts associated with semiaquatic mammals (e.g. flooding of homes, road damage). However, there is still some potential for conflict in SDAs, such as environmental damage by invasive nutria, so if a land management agency request assistance with semiaquatic mammal damage, the site-specific conditions will be reviewed and the need for additional environmental compliance analyses will be considered in accordance with the designating laws and regulations (EA Appendix A.3 and A.4.1.3).

6 Issues

The EA identified the following issues (EA Section 2.1) and used them to drive the environmental analysis and compare the potential impacts of alternatives.

1. Effects on Target Species Populations - What might be the direct, indirect, and cumulative impacts of removing semiaquatic mammals on target 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 T&E Species and Critical Habitat - What might be the direct, indirect, and cumulative impacts on T&E species and their habitats?
4. Effects on Biodiversity and Ecosystem Resilience - How would the alternatives impact trophic cascades, biodiversity, and ecosystem resilience? Does the proposed MDM cause trophic cascades, loss of biodiversity, declines in habitat quality for aquatic and terrestrial species, or broad wildlife population changes which impact the ecosystem?
5. Effects on Human and Pet Health and Safety - What are the potential risks and benefits of MDM methods to human and pet health and safety?
6. Humaneness and Ethical Considerations - 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?

7 Alternatives

WS-Oregon identified 5 alternatives in the EA for which the 6 issues identified (EA Section 2.2) were analyzed in detail. Table 4 in the EA (Section 2.2.1) summarizes the difference in SMDM activities the WS-Oregon may conduct under each of the Alternatives. Thirteen additional alternatives were considered, but not analyzed in detail in the EA (EA Appendix C).

Under any of the Alternatives, ODFW, USFWS, Wildlife Control Operators, landowners and their agents, and private individuals can conduct SMDM using almost the same methods as WS-Oregon, (EA Sections 3.1.1 and 3.1.2). The only methods proposed by WS-Oregon that are not available to the general public are the FDA-registered drugs for immobilization and euthanasia and zinc phosphide. The degree to which these entities conduct SMDM under each alternative is expected to vary proportionately with WS-Oregon's availability to provide SMDM assistance. This means that if WS-Oregon is unable to provide SMDM, other entities would be available to fill in (EA Section 3.1.4). The impacts of non-WS involvement in SMDM management are considered for each issue.

The alternatives considered in detail in the EA are summarized below. EA Section 2.2 summarizes each alternative and Chapter 3 provides detailed analysis and comparison of the potential effects of each alternative.

7.1 Alternative 1 – WS-Oregon Implements Integrated Wildlife Damage Management for Semiaquatic Mammals Statewide (Proposed Action)

Alternative 1 (the Proposed Action) allows WS-Oregon to implement an adaptive, integrated approach utilizing non-lethal and lethal techniques to address conflicts with semiaquatic mammals where requested and authorized. WS-Oregon may respond to requests for assistance by:

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

Resource owners would still have the option of implementing their own SMDM, as WS-Oregon conducts wildlife damage management (WDM) only when requested by the landowner/manager and only after a WID or other agreement is signed.

Under this alternative, WS-Oregon could use or recommended the methods, or a combination of the methods detailed in EA Appendix D. In accordance with WS Directive 2.101, WS-Oregon gives preference to non-lethal methods where they are practical and effective.

The public expressed a strong preference for the use of beaver relocation and water flow control devices as alternatives to lethal methods. Water flow control devices include a variety of methods including pond-levelers, beaver deceivers, and other beaver exclusions designed to allow beaver to construct dams/blockages without stopping the flow of water. Beaver relocation and the installation of flow control devices are included in the proposed action (EA Appendix D.1) but cannot be conducted at the sole discretion of WS-Oregon because they are subject to restrictions under state law and the ESA (EA Appendix H.3.2). In situations where these methods have the potential to

effectively reduce or prevent damage, WS-Oregon will give preference to their use, but if the required approvals for these methods cannot be obtained in a timely manner to adequately reduce damage or threats, the use of other methods will be necessary. This does not preclude their implementation once the initial damage or threat is alleviated to prevent recurring damage, and WS-Oregon recognizes their value as a coexistence strategy.

7.2 Alternative 2 – Limited Methods for Nutria Management and Beaver Damage Management Assistance Available Only Outside of Excluded Areas (No Action Alternative/Environmental Baseline)

Alternative 2 (EA Section 2.2.2) is the “No Action” Alternative, as defined by the Council on Environmental Quality, which is the current SMDM approach used by WS-Oregon. Under the No Action Alternative, WS-Oregon would continue the ongoing limited SMDM activities, which include the use of limited methods to address nutria damage and limited operational beaver damage management. Currently, beaver damage management is only conducted for the protection of human safety outside of “excluded areas” (i.e., USFWS designated critical habitat for aquatic species, USFWS identified areas for Oregon spotted frog, NMFS trust Resources streams, and federal managed lands) with the exception of potentially responding to emergency requests from state or county road departments that have a right-of-way or easements to maintain a state highway or roadway if beaver damage is causing an imminent threat to human health and safety. Under this alternative, WS-Oregon has limited ability to 1) assist in non-lethal method research, 2) address nutria damage, 3) assist in beaver relocation efforts, and 4) address damage to property and agriculture (EA Table 4).

Within those limitations, WS-Oregon currently provides education and training, technical assistance, and/or limited operational assistance by applying lethal and non-lethal methods in an integrated and adaptive process. Preference is given to nonlethal methods when they are appropriate and effective, in accordance with WS Directive 2.101. Members of the public, private property owners, businesses, non-governmental organizations, land managers, State agencies, and Federal agencies are among the entities that request SMDM assistance from WS-Oregon to protect natural resources from damage. Requesting entities may also use the contractual services of private businesses, use volunteer services of private organizations, request assistance from ODFW and/or its agents, request to use the services of WS-Oregon (operational assistance), or take no action.

7.3 Alternative 3 – Integrated SMDM for Nutria Only

Alternative 3 would allow for WS-Oregon to use the full range of methods and strategies included in Alternative 1 to reduce nutria damage, not just cage traps and firearms as prescribed in the current program (Alternative 2). Due to nutria being an invasive species, and in accordance with Executive Order 13112, nutria are lethally removed when and where possible, within the confines of WS-Oregon’s WIDs, cooperative service agreements (CSAs), and memorandums of understanding (MOUs).

For native semiaquatic mammal species, WS-Oregon could only provide technical assistance for management strategies and/ or use non-lethal methods. Resource owners would still have the option of implementing their own non-lethal and lethal methods or get assistance from another

entity (e.g. wildlife control operators or ODFW) and WS-Oregon anticipates that non-WS entities will provide SMDM that WS-Oregon is unable to provide

Under this alternative, there would be no ability for WS-Oregon to assist with beaver relocation or research.

7.4 Alternative 4 – Limited Methods for Nutria Damage Management and Only Non-lethal Management for Native Species

Alternative 4 proposes the exclusive use of cage traps and shooting for nutria damage management, as described in Alternative 2 (the no action alternative) and excludes any type of lethal damage management assistance for native species.

WS-Oregon would be able to assist with beaver capture and relocation efforts under this alternative, but there would be less opportunity for WS-Oregon to provide beavers due to reduced SMDM activities overall. Relocation is not a completely non-lethal method, as mortality can result from the stress and disorientation that results from being relocated. Petro (2013) documented that only 47% of relocated beaver survived past 16 weeks post-relocation, with predation by cougars being the primary cause of death. However, relocation is not an intentionally lethal method, and lethal impacts are minimized by following ODFW's relocation protocols (EA Appendix D). WS-Oregon would be able to assist with some research projects under this alternative, as long as lethal beaver damage management was not part of the study protocol.

7.5 Alternative 5 – No SMDM Assistance Available from WS-Oregon

Alternative 5 would eliminate all WS-Oregon's SMDM (operational and technical assistance) in Oregon. SMDM activities would continue to be conducted in Oregon by others because of the need for this type of expertise and service (EA Section 3.1). Federal, state, county and city governments, and private individuals, businesses, or organizations would need to implement methods themselves or seek out other private pest control operators and contractors to address damage issues. Due to the potential significant damage and issues caused by semiaquatic mammals, it is reasonable to assume that other entities would fill the void left by WS-Oregon and would continue or begin implementing semiaquatic mammal damage management.

WS-Oregon would not be available to provide technical assistance for any semiaquatic mammal conflicts. WS-Oregon would not be available to research, develop, implement, or recommend information on developments in non-lethal and lethal management techniques. It is possible that SMDM methods could be used unsafely and improperly by resource owners because of inexperience or inability to reduce damage to a tolerable level. This could result in harm to the environment, or higher levels of non-target take.

7.6 Alternatives That Were Considered but Dismissed from Comparative Analysis

Thirteen alternatives (Appendix C.8-C.20), typically consisting of requests to use or not use various types of methods or strategies in SMDM activities, were dismissed from comparative analysis because WS-Oregon determined that they were redundant to the analyzed alternatives, did not meet the purpose and need, or were not reasonable alternatives, as defined by CEQ (40 CFR 1508.1(hh)). EA Appendix C documents the agency's determination for each of these alternatives.

8 Monitoring

Under Alternative 1, WS-Oregon will monitor its activities 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, in accordance with 40 CFR 1501.5.

9 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 as applicable.

10 Clarifications and Additions to the Draft EA

WS-Oregon summarized and responded to all comments in Appendix J of the EA. Changes to the Pre-decisional EA that were made in the EA were noted in Appendix J. All public comment submissions can be viewed in [Regulations.gov Docket number APHIS-2024-0024](https://www.regulations.gov/docket/APHIS-2024-0024).

11 Review of Environmental Consequences

Chapter 3 of the EA includes a detailed analysis of the potential environmental consequences or effects of SMDM in Oregon. In comparing the alternatives for their effects on the human environment, WS-Oregon analyzed the direct and cumulative effects on the biological and physical environment (intentional take, threatened and endangered species take, unintentional take, and biodiversity and ecosystem resilience) and sociocultural environment (ethics and humaneness, and human and pet health and safety).

WS-Oregon is selecting Alternative 1, which is not only balanced in its ability to meet the program goals and objectives, but it will also have a low risk of adverse environmental effects. The comprehensive approach to SMDM allowed in Alternative 1 integrates proven, effective methods with increased capacity for research, education and outreach efforts to any entity that requests assistance, including federal, state and tribal entities, and providing one-on-one assistance to individuals requesting assistance. The selected alternative gives WS-Oregon the oversight and flexibility to effectively manage damage from semiaquatic mammal populations, in partnership with federal, state, tribal, and local management agencies, and in accordance with the management goals of partner agencies. Alternative 1 provides flexibility for WS-Oregon to adapt or alter management techniques to best suit new challenges associated with damage caused by semiaquatic mammals state-wide to meet the goals and objectives outlined in the EA.

Alternative 1 incorporates all applicable directives, consultations, and state laws described in the Final EA. These and other policies are described in the EA (Appendix B), and in APHIS-WS Directives which are available at <https://www.aphis.usda.gov/wildlife-services/directives>. Additionally, WS-Oregon's implements all Terms and Conditions of ESA consultations incorporated by reference into the EA (EA Section 2.3.7), utilizing BMPs related to method humaneness, coordination and agreements that are developed with all land managers or landowners, and strict policies on safety, training, certification, and use of SMDM methods. These policies and procedures are incorporated into the selected action, and no mitigation was deemed to be necessary to minimize environmental risks.

The restrictions of WS-Oregon's ability to use any strategy or combination of methods to alleviate human-wildlife conflicts under Alternatives 2, 3, 4, and 5 could result in less effective and less environmentally responsible resolution of SMDM issues, as described in Sections 3.2.6.2-5, 3.3.2.2-5, 3.4.3.2-5, 3.5.3, 3.6.1, and 3.7.1. Non-WS entities may provide SMDM, but there are large variances in the quality of the services and the accountability to the public (EA Section 3.1.1). Should WS-Oregon be unable to provide SMDM, there would likely still be some level of SMDM available to those experiencing damage, and WS-Oregon has analyzed the effects of reasonably foreseeable non-WS participation. Section 3.1 of the EA discusses and compared how other entities may meet the need for SMDM when WS-Oregon is limited or absent.

11.1 Effects on Target Species Populations (EA Section 3.2)

The EA indicates that WS-Oregon'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-Oregon's analysis of impacts on target species is predicated on conservative estimates of population size, which results in an overestimation of impacts of the proposed actions. Tables 5 through 9 (EA Section 3.2) provide conservative projections of lethal take by all entities for species included in the EA, based on information reported to ODFW and data collected by WS-Oregon.

The alternatives represent varying amounts of WS-Oregon involvement in SMDM either by restricting the types of responses or the available tools. Under Alternative 1, WS-Oregon could provide professional integrated management for the five species considered in the EA, when and where requested. Alternative 2 is more restrictive than the Alternative 1 by restricting the methods that may be used to address nutria damage, restricting beaver damage management from excluded areas, and prohibiting WS-Oregon assistance with conflicts with mink, muskrat, and river otter. Under Alternative 3, WS-Oregon cannot provide any operational assistance for native species and, under Alternative 4, WS-Oregon can only use non-lethal methods to address semiaquatic mammal damage from native species. Alternative 5 does not allow WS-Oregon to provide any assistance for any semiaquatic mammal damage.

For Alternatives 3 and 4, we anticipate that cumulative lethal take will remain similar to Alternatives 1 and 2 because cooperators will still seek lethal remedies from non-WS entities if non-lethal efforts are not feasible or unsuccessful. The difference between the alternatives is primarily who conducts the damage management and how much is conducted by non-WS entities. Landowners and private wildlife control operators may provide lethal SMDM if WS-Oregon is unavailable. As explained in EA Section 3.1.1, WS-Oregon expects that non-WS entities will provide SMDM assistance in the absence of WS-Oregon's availability and take of target species is likely to be similar across all alternatives. While Alternative 1 has the highest anticipated level of lethal take by WS-Oregon, the analyzed take for each species are below the maximum sustainable harvest level for a sustainable population. Therefore, the implementation of Alternative 1 will not significantly impact target species populations.

11.2 Effects on Non-target Species (Sections 3.3)

WS-Oregon took an average of 11.2 non-target animals per year during SMDM activities, which is approximately 1.3% of the average annual WS-Oregon lethal take total for SMDM activities in the state

(EA Section 3.3.1). This shows a high level of selectivity in the application of SMDM methods by WS-Oregon personnel and WS-Oregon concludes that direct effects to non-target species would be minimal under all alternatives.

Under Alternatives where WS-Oregon is not available to provide fully integrated SMDM assistance when requested (Alternatives 2-5), non-WS entities are likely to provide SMDM. WCOs (wildlife control operators) and landowners are legally authorized to conduct their own lethal SMDM for most situations (EA Sections 3.1.1). However, landowners generally do not have the same level of training, experience, and procedures to safely and efficiently use a wide range of SMDM methods. Due to variability in training and efficiency of non-WS entities, there is likely to be slightly greater impacts to non-target species under alternatives where WS-Oregon is less available (EA Section 3.1.4). Although it is not possible to anticipate exactly how many additional non-target animals would be taken by non-WS-Oregon entities, it is assumed that non-target take would remain low relative to their populations. The semiaquatic mammal species in this EA are generally resilient, and cumulative take is below the current annual maximum sustainable harvest levels (Section 3.2). Therefore, the impacts to populations of non-target animals under Alternatives 2-5 could exceed those of Alternative 1, but still would not be significant.

11.3 Effects on Threatened and Endangered (T&E) Species and Critical Habitat (Section 3.4)

WS-Oregon completed 5 consultations with USFWS and NMFS (EA Section 3.4.1) under Section 7 of the Endangered Species Act which evaluate SMDM activities for effects on federally listed T&E species. Based on compliance with all terms and conditions of those consultations, WS-Oregon has determined there will not be significant adverse effects to federal or state-listed species (EA Section 3.4). These consultations, and the protective measures associated with them (EA Appendix H.1-H.3), apply to WS-Oregon SMDM operational activities under Alternatives 1-4 (Alternative 5 is no WS-Oregon SMDM). Non-WS entities are not bound by these protective measures, and their activities may have a greater impact on federally or state-listed threatened or endangered species. Therefore, Alternatives 2-5 present a greater risk to both federally and state-listed threatened and endangered species than Alternative 1.

11.4 Effects on Biodiversity and Ecosystem Resilience (Section 3.5)

WS-Oregon's goal is to reduce damage or threats caused by semiaquatic mammals, when requested, and in compliance with applicable local, state, and federal laws. Strategies for resolving damage focus on the offending animal(s) and do not include managing any species' population. WS-Oregon does not propose to eliminate native semiaquatic populations from any area, , and eradication is not the purpose and need of this EA. The analysis in the EA indicates that none of the alternatives would result in significant adverse effects to semiaquatic mammal populations or the ecosystems they inhabit. Beavers can impact local hydrology, ecology, and nutrient cycles, and have been shown to increase diversity, abundance, nutrient content, dissolved oxygen content, and surface water infiltration, while lowering water temperature and turbidity. However, impacts on semiaquatic mammal populations were analyzed in EA Section 3.2 and are expected to be minimal and temporary, affecting only small or isolated geographic areas for short periods of time. Therefore, the proposed action is unlikely to have adverse or significant effects on biodiversity and ecosystem resilience (EA Section 3.5). The EA process has not identified any adverse effects that might alter ecosystems or their processes or state-wide

semiaquatic mammal distribution. We have determined, therefore, that WS-Oregon's proposed action under Alternative 1 is not of sufficient magnitude or scope to result in ecosystem-level changes in resilience or to significantly adversely impact biodiversity.

11.5 Effects on Human and Pet Health and Safety (Section 3.6)

WS-Oregon determined that none of the alternatives have a significant impact on human and pet safety. Alternatives that limit WS-Oregon's involvement in SMDM (Alternatives 2-5) may result in increased SMDM by less skilled non-WS entities, which could result in increased adverse effects compared to Alternative 1, the Preferred Alternative.

WS-Oregon determined the risks to human health and safety from its proposed actions are low under all the alternatives. The analysis in the EA determined that WS-Oregon's implementation of SMDM presents low risk to the public and environmental resources because there is relatively little public exposure to the proposed methods due to the limited amount of SMDM that WS-Oregon conducts on public land. Additionally, WS-Oregon 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. Therefore, risks may be slightly higher for alternatives that increase the amount of SMDM that may occur by non-WS entities.

11.6 Humaneness and Ethics Considerations (Section 3.7)

Although ethical perspectives and perceptions of humaneness vary depending upon individual values and experiences, the EA considered the best available science and professional guidance (e.g., American Veterinary Medical Association and Best Management Practices) on the subject. The EA discussed perspectives on humaneness and ethics related to wildlife damage management in EA Section 3.7 and Appendix I. All methods included for use by WS-Oregon in the EA are available to non-WS entities, except for FDA-registered drugs and zinc phosphide, and each of those methods was evaluated for humaneness and selectivity by AFWA. Non-WS entities may use other methods, mainly trap types, that are not BMP compliant, which may be less inherently humane. The alternatives were evaluated for how humanely SMDM is likely be conducted under each alternative based on the reasonably foreseeable portion of SMDM that could be conducted by less skilled non-WS entities.

In Section 3.7, Table 15, of the EA, WS-Oregon evaluated the humaneness of SMDM conducted under each alternative. WS-Oregon personnel are trained in SMDM, follow the applicable American Veterinary Medical Association (AMVA) guidelines, Association of Fish and Wildlife Agencies (AFWA) Best Management Practices (BMPs), ESA Conservation Measures, and other protective measures in Section 2.3 of the EA, so WS-Oregon is likely to be safer and more humane in conducting SMDM when compared to less skilled, non-WS personnel (EA Section 3.1.2). Therefore, Alternative 1 is likely to be the most humane alternative because WS-Oregon has the greatest ability to provide professional SMDM assistance. WS-Oregon concluded Alternatives 2-4 are potentially less humane and ethical because of the higher amount of SMDM that may be conducted by non-WS entities.

Table 1. Summary of Environmental Issues and Proposed Action Components Compared for Each Alternative

| Issues | Alternative 1 Preferred Alternative - Full, Integrated SMDM Program | Alternative 2 No Action - Limited Nutria and Beaver Management | Alternative 3 Full, Integrated SMDM for Only Nutria | Alternative 4 Limited Methods for Nutria Damage Management, Non- lethal Only for Native Species | Alternative 5 No WS-Oregon SMDM Activities |
|---|--|--|--|--|--|
| WS-Oregon's Effects on Special Designation Areas <i>EA Section 1.5.1</i> | Low impact. WS-Oregon does not anticipate requests to work in SDAs. | Low impact. In addition to not anticipating work in SDAs, beaver damage management is not conducted on any federally-managed lands except for emergency responses. | Less impact than Alt 1 because WS-Oregon would not conduct SMDM for native species. Nutria removal would be beneficial to the environment in accordance with land management agency permissions. | Less than Alt 1 due to limited ability to assist with invasive species management. | No Impact by WS-Oregon, highest potential impact from non-WS entities. |
| WS-Oregon's Ability to Provide Education and Technical Assistance <i>EA Sections 2.2, 2.3.1.1, and 2.3.1.2</i> | Full Ability | Full Ability | Full Ability | Less than Alt 1. WS could not provide technical assistance for lethal damage management of native species. | No Ability |
| WS-Oregon Use of Beaver Relocation <i>EA Section 2.2.1</i> | Allowed | Less use than under Alt 1 because of limits on WS involvement in beaver damage management | No | Allowed | No |
| WS-Oregon's Ability to Participate in Research and Implementation of Non-lethal Methods <i>EA Section 2.2.1</i> | High participation | Less ability to participate than under Alt 1 because of restricted SMDM for beaver | Limited participation because WS-Oregon would only provide technical assistance for native species management. | High participation but less than Alt 1 (where research requires beaver capture, which may result in unintentional take). | No participation |
| Effects on Target Species Populations <i>EA Section 3.2</i> | No significant impact to any native semiaquatic mammal populations. All cumulative take is anticipated to be below the conservative estimates of maximum sustainable harvest levels. | WS-Oregon effects to semiaquatic mammals less than Alt 1 but similar cumulative effects as other alternatives | Same effects to nutria as Alt 1 but fewer effects by WS-Oregon to native species. Similar cumulative effects as other alternatives. | WS-Oregon effects to nutria less than Alts 1 and 3, the same as Alt 2, and more than Alt 5. WS-Oregon effects to native species less than Alts 1 and 2 and more than Alts 3 and 5. Similar cumulative effects to all target species. | No effect by WS-Oregon. Highest impact by non-WS entities. |
| WS-Oregon's Direct Effects on Beaver Populations <i>EA Section 3.2.1</i> | Analyzed annual maximum take of up to 750 beaver, or 1.3% of the estimated statewide population. | Less than Alt 1 due to limitations on beaver damage management. | Less than Alts 1 and 2. | Less than Alts 1 and 2, and only non-lethal effects (e.g., disturbance, relocation). | No take by WS-Oregon |

| Issues | Alternative 1 Preferred Alternative - Full, Integrated SMDM Program | Alternative 2 No Action - Limited Nutria and Beaver Management | Alternative 3 Full, Integrated SMDM for Only Nutria | Alternative 4 Limited Methods for Nutria Damage Management, Non- lethal Only for Native Species | Alternative 5 No WS-Oregon SMDM Activities |
|--|---|---|--|--|---|
| WS-Oregon's Direct Effects on Nutria Populations <i>EA Section 3.2.2</i> | Analyzed annual maximum take of up to 3,000 nutria, or 6% of the estimated statewide population. | Less than Alts 1 due to limited methods available. . | Same as Alt 1. | Same as Alt 2. | No take by WS-Oregon |
| WS-Oregon's Direct Effects on Muskrat Populations <i>EA Section 3.2.3</i> | Analyzed annual maximum take of up to 100 muskrats, or 0.06% of the estimated statewide population. | No take by WS-Oregon. | No take by WS-Oregon. | Less impact than Alt 1, but only nonlethal effects. | No take by WS-Oregon |
| WS-Oregon's Direct Effects on River Otter Populations <i>EA Section 3.2.4</i> | Analyzed annual maximum take of up to 100 river otters, or 0.14% of the estimated statewide population. | No take by WS-Oregon. | No take by WS-Oregon. | Less impact than Alt 1, but only nonlethal effects | No take by WS-Oregon |
| WS-Oregon's Direct Effects on Mink Populations <i>EA Section 3.2.5</i> | Analyzed annual maximum take of up to 100 mink, or 0.18% of the estimated statewide population. | No take by WS-Oregon. | No take by WS-Oregon. | Less impact than Alt 1, but only nonlethal effects | No take by WS-Oregon |
| Effects on Non- target Species <i>EA Section 3.3</i> | Negligible effect. EA showed that WS-Oregon's non-target take averages only 5.6 animals per year during SMDM activities. | Less potential to affect non-target species by WS-Oregon but a potential for increased take by Non-WS entities. | WS-Oregon take may be equal to or less than Alt 4, and less than Alts 1 and 2. Risk of increased cumulative take by others. | Use of only non-lethal methods would reduce risk of killing non-target animals. Risk of increased take by non-WS entities. | No impact by WS-Oregon. Non-WS entities would likely have greatest effects when compared to Alternatives 1-4. |
| Effects on Threatened and Endangered Species and Critical Habitat <i>EA Section 3.4</i> | Minimal impact based on the analysis and implementation of protective measures established through the Section 7 consultations completed with USFWS and NMFS. | No adverse or beneficial impacts from WS-Oregon's activities in designated areas. Less impact by WS-Oregon compared to Alt 1. Activities by non-WS entities would be expected to increase risks to T&E species under Alt 2. | Equal to or less impact by WS-Oregon compared to Alts 1 and 2. Activities by non-WS entities expected to increase cumulative risks to T&E species. | Equal to or less impact by WS-Oregon compared to Alts 1 and 2. Reduced availability of WS-Oregon could increase SMDM activities by non-WS entities, which is expected to increase cumulative risks to T&E species. | No impact by WS-Oregon. Increased activities by non-WS entities would be expected to increase risks to T&E species compared to Alternatives 1-4. |
| WS-Oregon's Effects to Biodiversity and Ecosystem Resilience <i>EA Section 3.5 Table 13.</i> | No alteration of ecosystems or their processes or adverse effects to native populations, so it's unlikely there will be an adverse effect on biodiversity. | Negligible effect due to limited lethal removal of any native species. However, limitations on lethal nutria removal may result in adverse impacts to the environment through continued nutria damage. | No adverse effect by WS-Oregon, but potential benefit to ecosystems through nutria removal. Increased beaver management by non-WS entities could cause greater impacts on biodiversity than Alt 1. | Limitations on nutria removal may negatively affect ecosystems. Non-lethal methods on native species unlikely to adversely impact ecosystems and biodiversity. Likely similar impacts as Alt 2, but likely increase impact on biodiversity | Greatest potential impact on biodiversity and ecosystem resilience because WS-Oregon will not be available to implement SMDM in accordance with the conservation measures and terms and conditions in ESA consults. |

| Issues | <u>Alternative 1</u> Preferred Alternative - Full, Integrated SMDM Program | <u>Alternative 2</u> No Action - Limited Nutria and Beaver Management | <u>Alternative 3</u> Full, Integrated SMDM for Only Nutria | <u>Alternative 4</u> Limited Methods for Nutria Damage Management, Non-lethal Only for Native Species | <u>Alternative 5</u> No WS-Oregon SMDM Activities |
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| | | | | due to more removals by non-WS entities. | |
| WS-Oregon's Effects on Human and Pet Health and Safety <i>EA Section 3.6 Table 14.</i> | Low to negligible risk from mechanical and chemical methods, including lead ammunition based on WS-Oregon's implementation with protective measures (EA Section 2.3.9). | Cumulatively greater risk than Alt 1, due to increased non-WS involvement in SMDM, but no adverse impacts have been documented since this No Action alternative was implemented in 2016. | Greater risk than Alt 2 due to non-WS entities conducting SMDM without the same protective measures that WS-Oregon would've used. | Greater risk than Alt 2 due to non-WS entities conducting SMDM without the same protective measures that WS-Oregon would've used. | Greatest risk to human and pet safety. |
| WS-Oregon's Effects on Humaneness and Ethical Considerations <i>EA Section 3.7 Table 15</i> | Determined to be the most humane alternative because WS-Oregon adherence to high standard of humaneness and ethics in accordance with applicable laws and nationally recognized guidelines on humaneness. | Increased perceived humaneness due to limitations on WS-Oregon activities when compared to Alt 1, but likely overall greater adverse impact to humaneness due to increased non-WS entity involvement. | Increased perceived humaneness when compared to Alts 1 and 2, due to limitations on WS-Oregon activities but overall greater impact to humaneness due to increased non-WS entity involvement. | Increased perceived humaneness when compared to Alt 1 due to limitations on WS-Oregon activities but overall greater impact to humaneness due to increased non-WS entity involvement. | All SMDM would be conducted by non-WS entities who are not required to implement protective measures or BMPs, so there is likely a greater impact to humaneness than Alternatives 1-4. |

12 Ability to Meet APHIS-WS' Goal and Objectives

The EA described each alternatives' ability to meet the Goal and Objectives presented in EA Section 1.4. The goal of the WS-Oregon SMDM activities is to manage semiaquatic damage by responding to all requests for assistance using education, technical assistance, and/or operational assistance, regardless of the source of the request, private or public. EA Section 3.8 (Table 16) compares the ability of each alternative to meet the objectives defined in EA Section 1.4. 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, WS-Oregon was 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 SMDM. Only Alternative 1, the preferred alternative, met all five objectives. Alternatives 2-5 fell short in the objectives, due in part to the curtailed ability of WS-Oregon to perform SMDM and the potential for increased negative effects.

13 Related Analyses

This Decision and FONSI, and the final EA on SMDM in Oregon replaces previous analyses of SMDM prepared by WS-Oregon. Prior analyses include the following EAs:

- 1) 1995 EA and 1996 Decision/FONSI for Wildlife Damage Management in the Roseburg Animal Damage Control (ADC) District in Southwestern Oregon

- 2) 1996 EA and Decision/FONSI for Wildlife Damage Management in the John Day ADC District in Eastern Oregon; and
- 3) 1997 EA and Decision/FONSI for Wildlife Damage Management for the Protection of Livestock, Property and Human Health and Safety, Oregon ADC Northwest District.

14 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 Preferred Alternative, best addresses the need for action and issues identified in the EA and will not result in significant effects to the human environment. Alternative 1 is selected because: (1) it offers the greatest opportunity to 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 and ethics, 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 semiaquatic mammal populations, with moderate effects being short-term and localized; and, (6) impacts on target semiaquatic mammal populations would not be of significant magnitude, scope, or duration to result in substantial indirect impacts due to biodiversity or ecosystem resilience. This decision is based on a thorough review of the alternatives set forth in the EA, their ability to meet the objectives (EA Section 3.8, Table 16), and their environmental consequences (EA Sections 3.2-7).

15 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) is not necessary. This determination is based on consideration of the following significance factors:

- A. The proposed activities will occur in limited areas of Oregon, when requested, and are not national or regional in scope (EA Section 1.5).
- B. The proposed activities will not significantly affect human health and safety. SMDM methods are target specific and are not likely to adversely affect human health and safety (EA Section 3.6). In some cases, WS-Oregon may conduct SMDM to reduce risks to human health and safety caused by semiaquatic mammals. WS-Oregon is not aware of members of the public harmed in Oregon by SMDM activities.
- C. The proposed activities will not significantly affect the physical environment including any unique characteristics, historic or cultural resources, or other ecologically critical areas.
- D. Data contained in the EA (Sections 3.2) demonstrates that the number of semiaquatic mammals taken by WS-Oregon will not have a significant impact on target species populations, preserving an abundance of semiaquatic mammals for future enjoyment.
- 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. Although exact population estimates are not available for some target species, the EA uses the best information available.

This EA relies on 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-Oregon SMDM 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, non-target, and ESA-listed species and ecosystems and project monitoring helps to ensure that program activities do not have significant unintended adverse impacts. Consultation and coordination with the state and or other agencies helps to minimize potential adverse effects to recreation. The proposed activities are routinely employed to alleviate wildlife damage across APHIS-WS. Methods/strategies proposed for use are routine and WS-Oregon 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-Oregon makes management decisions based on the analysis in the EA, but 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 SMDM services requested and authorized by state and local (e.g., county) management entities.
- G. The EA does not identify any significant cumulative effects. WS-Oregon will coordinate all SMDM activities, including removal, with the applicable regulatory agency (e.g., USFWS, NOAA, and ODFW,) to help ensure cumulative impacts of WS-Oregon'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-Oregon's semiaquatic mammal take are not of significant duration, scope, or magnitude to result in sustained reductions in semiaquatic mammal populations and associated biodiversity and ecosystem resilience. WS-Oregon SMDM activities have not resulted in take or harm of any threatened or endangered species since at least 2005 (Management Information Systems 2024). WS-Oregon continues coordination with USFWS and ODFW to avoid take of threatened and endangered species and has completed ESA consultations with USFWS and NMFS for listed species in Oregon.
- H. The proposed activities do not affect sites, 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.
- I. The proposed action will not violate any Federal, State, tribal, or local laws designed for the protection of the environment.
- J. There are no irreversible or irretrievable resource commitments identified by this assessment.

For additional information regarding this decision, please contact Kevin Christensen, State Director, USDA-APHIS-Wildlife Services, 6035 NE 78th Ct, Ste 100, Portland, OR 97218.

Wendy Anderson
Regional Director, Western Region
USDA-APHIS-Wildlife Services