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Animal and
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Inspection
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Wildlife
Services

Washington State
Office

720 O'Leary Street
Olympia, WA 98502

(360) 753-9884
(360) 753-9466 Fax

DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT
FOR
AQUATIC MAMMAL DAMAGE MANAGEMENT
in WASHINGTON STATE

I. INTRODUCTION

On September 2, 2008, the U.S Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS), Wildlife Services (WS)¹ issued an Environmental Assessment (EA) that analyzed potential impacts of a proposed program² and alternatives to reduce human/aquatic mammal conflicts (*i.e.*, aquatic mammal damage management³) associated with beaver (*Castor canadensis*), nutria (*Myocastor coypus*), muskrat (*Ondatra zibethica*), mink (*Mustela vison*), and river otter (*Lutra canadensis*) in Washington. WS responds to requests for assistance from individuals, organizations and agencies⁴ experiencing damage caused by wildlife. To evaluate and determine if any potentially significant impacts to the quality of the human environment from WS' planned and proposed program would occur, an environmental assessment⁵ (EA) was prepared. The EA documents the need for aquatic mammal damage management in Washington to protect resources and health and safety on private and public lands throughout the state and assessed potential impacts of various alternatives for responding to requests to reduce damage. WS' proposed action is to implement an Integrated Wildlife Damage Management (IWDM) program, commonly known as Integrated Pest Management (WS Directive 2.105), in which a combination of methods may be used or recommended to reduce damage on public and private lands in Washington. A wide range of legal methods are available for reducing aquatic mammal damage. These fall into two categories: localized habitat modification (*e.g.*, beaver pond leveler, dam removal, exclusion) and population management (*i.e.*, animal removal). Aquatic mammal damage management would be allowed in the State under the proposed action when requested on public and private lands where signed *Agreements for Control*,² or an appropriate work plan is in place. All aquatic mammal damage

¹ WS is the Federal program authorized by law to reduce damage caused by wildlife (*i.e.*, wildlife damage management) (Act of 1931, as amended (46 Stat. 1486; 7 U.S.C. 426-426c) and the Rural Development, Agriculture, and Related Agencies Appropriations Act of 1988, Public Law 100-102, Dec. 27, 1987. Stat. 1329-1331 (7 U.S.C. 426c), and the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act of 2001, Public Law 106-387, October 28, 2000. Stat. 1549 (Sec 767).

² An overarching factor in determining how to analyze the potential environmental impacts of WS' involvement in aquatic mammal damage management is that such management will likely be conducted by State, local government, or private entities that are not subject to compliance with the National Environmental Policy Act if WS is not involved. This means that the WS program has limited ability to affect the environmental outcome of aquatic mammal damage management in the State, except that the WS program is likely to have lower risks to non-target species and less impact on wildlife populations than some alternatives available to resource owners/managers. Therefore, WS has limited ability to affect the environmental *status quo*. Despite this limitation to Federal decision-making, this EA process is valuable for informing the public and decision-makers of the substantive environmental issues and alternatives for management of aquatic mammal damage.

³ Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). WS wildlife damage management is not based on punishing offending animals but as one means of reducing damage and is used as part of the WS Decision Model (Slate et al. 1992, USDA 1997, WS Directive 2.201).

⁴ Resource management agencies, organizations, associations, groups, and individuals have requested WS to conduct aquatic mammal damage management to protect property, agricultural and natural resources, and human health and safety in Washington. All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Clean Water Act and Endangered Species Act of 1973.

⁵ Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995).



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management will comply with Federal, State, and local laws, permitting processes⁶, and current MOUs between WS and the various management agencies.

II. BACKGROUND

The determination of need for Washington WS' assistance is based on damage to property, agricultural and natural resources, and human health and safety. The types of beaver, nutria, and muskrat damage that resource owners seek to alleviate include; flooding of agricultural land, private property, and roads, prevention of road and railroad bed failure due to impounded water, protection of ornamental trees from cutting, protection of commercial trees and tree plantations from cutting and flooding, structural degradation of stormwater ditches, and protection of levees from burrowing. Additionally, nutria are an introduced species and often compete for food and space with native wildlife. The types of mink and otter damage that resource owners seek to alleviate include damage to fish in fish farms and hatcheries as well as damage to public and private docks. Details on the conflicts and benefits associated with aquatic mammals in Washington are provided in the EA.

State and Federal authorities⁷ have provisions permitting the removal of all or part of beaver dams. The Washington Department of Fish and Wildlife (WDFW) must issue a Hydraulic Project Approval (HPA) allowing the removal of beaver dams under certain criteria to protect the environment before WS conducts damage management activities. These approvals are issued to local municipalities, State agencies, or private individuals who may request assistance from WS⁸ or any contractor. For irrigation districts in the Columbia Basin Project (CBP) where beaver dams cause flooding or impede irrigation water, WS may use binary explosives to remove beaver dams in irrigation and drainage structures under existing authorities. The U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) concurred that the proposed action would not likely adversely affect any threatened and endangered (T&E) species.

III. MAJOR ISSUES CONSIDERED IN DETAIL

The following are the major issues identified by WS, WDFW and U.S. Fish and Wildlife Service (USFWS) as areas of concern requiring detailed consideration in this EA.

1. Effects on Target Aquatic Mammal Species Abundance
2. Effects on Non-target Species Abundance, Including T&E Species
3. Effects of Aquatic Mammal Damage Management on Public Safety

VI. ISSUES NOT CONSIDERED IN DETAIL WITH RATIONALE

- WS' Impact on Biodiversity
- Wildlife Damage Should Be an Accepted Loss
- Humaneness of Methods Used by WS
- American Indian and Cultural Resource Concerns
- Selectivity and Effectiveness of Methods
- Appropriateness of Preparing an EA

⁶ Waterways in Washington are subject to regulation from Federal, State, and local governments. To prevent violating these regulations, requesters of WS services would be required to apply for the proper permits using the Joint Aquatic Resource Permit Application (JARPA). Currently, JARPA is being used by the Washington Department of Ecology (WDOE), WDFW, Washington Department of Natural Resources (WDNR), U. S. Army Corps of Engineers (USACE), the U.S. Coast Guard, and more than 90 local governments.

⁷ The WS EA only evaluated alternatives for WS involvement in aquatic mammal damage management and cannot change Washington State Statutes and WDFW policy permitting private landowners access to lethal and nonlethal alternatives for managing aquatic mammals.

⁸ Washington WS will only work under a permit issued to the requester under the JARPA process, or under consult, when required, with USFWS or National Marine Fisheries Service (NMFS), or when other entities possess appropriate authority.

- Impacts of Aquatic Mammal Removal on the Public's Aesthetic Enjoyment of Aquatic Mammals
- Direct, Indirect, and Cumulative Effects of Proposed Activities on Soils, Water Quality, Watersheds, Native Vegetation, and Recreation
- More Time and Money Should be Spent on Education
- Effects of Washington WS Beaver Dam Removal on Wetlands
- Encourage Bounties, Trapping, and Hunting to Reduce Damage (e.g., recreational harvest)
- Provide Compensation for Wildlife Losses

V. ALTERNATIVES THAT WERE CONSIDERED IN DETAIL

The Alternatives were developed for consideration using the WS Decision Model (Slate et al. 1992), "Methods of Control" (USDA 1997, Appendix J) and the "Risk Assessment of Wildlife Damage Control Methods Used by the USDA Animal Damage Control Program" (USDA 1997, Appendix P). Four alternatives were recognized, developed, and analyzed in detail and one alternative was considered but not analyzed in detail with rationale. A detailed discussion of the effects of the Alternatives on the issues is described in the EA; below is a summary of the Alternatives considered in detail.

Alternative 1 - Continue the Current WS Adaptive Aquatic Mammal Damage Management Program: (No Action/Proposed Alternative: The No Action Alternative (Proposed Alternative) continues the current Washington WS aquatic mammal damage management program. The current program is a collection of cooperative programs with public agencies, private individuals, and associations. Washington WS conducts technical assistance, operational preventive (i.e., before damage occurs), and corrective aquatic mammal damage management (in response to current loss) on private and public lands under Cooperative Agreements, Agreements for Control or other comparable documents and after permits from WDFW⁹ have been issued.

Before aquatic mammal damage management is conducted on private lands, an *Agreement for Control on Private Property* would be signed with the landowner or manager¹⁰ that describes the methods to be used and the species to be managed. For the removal of beaver dams from natural waterways, the NMFS will be consulted at least 10 days prior to removing the dam in an effort to maintain the integrity of the fish habitat. The removal of beaver dams from irrigation structures within the CBP will be conducted as necessary. Damage management would be directed toward localized populations or groups and/or individual animals.

Alternative 2 - Continue the Current WS Aquatic Mammal Damage Management Program, but Non-lethal Required Before Lethal Control: This Alternative would not allow the use of lethal methods by WS until all nonlethal methods had been attempted in a given damage situation and found to be ineffective or inadequate. No preventive lethal damage management would be allowed. Resource owners, however, would still have the option of implementing non-lethal and lethal aquatic mammal damage management. Personnel experienced in aquatic mammal damage management often already know when and where practical nonlethal damage management techniques would work. Therefore, this alternative requires the use of methods that are known to be ineffective, potentially leading to prolonged damage and risk to human health and safety.

Alternative 3 - Technical Assistance Aquatic Mammal Damage Management Program Only: This Alternative does not allow Washington WS to conduct operational aquatic mammal damage management. Washington WS personnel would only provide technical assistance when requested. However, private

⁹ All damage management is based on interagency relationships, which require close coordination and cooperation because of overlapping authorities and responsibilities.

¹⁰ For Federal, State, county, city, and tribal lands, Washington WS would coordinate damage management activities with the appropriate management agency.

landowners, resource owners, or others could conduct their own aquatic mammal damage management as permitted under state law, including the use of traps, snares shooting, and non-lethal methods. Methods and damage management devices could be applied by persons with little or no training and experience. This, in turn, could require more effort and cost to achieve the same level of problem resolution and if resource owners become frustrated they could resort to unconventional methods that cause harm to the environment or result in greater take of non-target animals.

The Technical Assistance Alternative would place the immediate burden of operational damage management work on other Federal, State or county agencies, and property owners. Individuals experiencing aquatic mammal damage would, independently or with Washington WS recommendations carry out and fund damage management activities. Individuals or agencies could implement damage management as part of the cost of doing business or assume a more active role in providing operational damage management. Under this Alternative Washington WS could not direct how State or county agencies or property owners would implement damage management. Some agencies or property owners may choose not to take action to resolve damage while other situations may warrant the use of legally available management methods because of public demands.

Alternative 4 - No WS Aquatic Mammal Damage Management Program: This Alternative eliminates all Washington WS' aquatic mammal damage management (operational and technical assistance). However, aquatic mammal damage management would continue to be conducted in Washington because of need. Federal, State, county and city governments, State and/or county agricultural organizations, private pest control operators and contractors, the public, and possibly other entities could fill the void left by WS and would continue or begin implementing aquatic mammal damage management.

Washington WS would not be available to provide technical assistance. Information on future developments in non-lethal and lethal management techniques that culminate from WS' research could not be recommended by WS and may not be available to resource owners. It is possible that some aquatic mammal damage management methods could be used unsafely and improperly, such as the illegal use of pesticides and traps simply out of frustration by resource owners because of the inability to reduce damage to a tolerable level. In addition, it is possible that inexperienced people using many of the aquatic mammal damage management methods could harm the environment, themselves, and result in the take of non-target species. Due to interest in this alternative, an analysis has been included. A "No Program" Alternative was also evaluated in USDA (1997).

VI. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE

- **Eradication and Long Term Population Suppression.**

An eradication alternative would direct all WS Program efforts toward total long-term elimination of aquatic mammals in cooperating counties or larger defined areas in Washington. In Washington, the eradication of beaver, otter, mink, and muskrat is not a desired goal of State agencies or WS.

Suppression would direct WS program efforts toward managed reduction of aquatic mammals. Considering large-scale population suppression as the basis of the WS program is not realistic, practical, or allowable under present WS policy.

VII. METHODS CONSIDERED BUT DEEMED IMPRACTICAL, INEFFECTIVE OR UNSAFE AT THE PRESENT TIME

- **Harassment :** Harassment has not been proven effective in resolving aquatic mammal damage problems. Destroying beaver dams and lodges without removing resident beaver rarely resolves damage

as beaver usually rebuild in the same vicinity in a short time. Also, removal of food supplies to discourage aquatic mammal activity is generally not economically feasible or ecologically wise.

- **Electromagnetic, Ultrasonic Repellents, and Electronic Frightening Devices:** These devices have been studied, developed, and marketed over the past 40 years (Shumake 1997). However, there are no efficacy data that exist to support the electromagnetic pest control concept or theory (Shumake 1997) and the EPA (1980) has indicated definitively that such devices have no effect on feeding, drinking, mating, or infestation patterns. Electronic frightening devices (artificial light and auditory tapes) rarely work for more than a few days or at most a week (Koehler et al. 1990, Shumake 1997, Nolte et al. 2003).
- **Reproduction Control:** At present, no chemical reproductive inhibitors are legal for use for beaver, nutria, otter, mink, or muskrat. For these reasons, this method was not considered by WS.
- **Biological Control:** There are no known acceptable biological control methods for aquatic mammals.

VIII. PUBLIC INVOLVEMENT

As part of this process, and as required by CEQ and APHIS NEPA implementing regulations, the EA was made available to the public for comment and the Decision is being provided to the public through “Notices of Availability” published in local media, on the APHIS website and through direct mailings to parties that have specifically requested to be notified.

The EA was prepared and released to the public for a 34-day comment period (September 2, 2008 – October 6, 2008) by a legal notice in the *The Olympian* on September 4-6, 2008, mailing notices to approximately 130 interested parties on September 10, 2008, and posting the EA on the APHIS website (http://www.aphis.usda.gov/regulations/pdfs/nepa/WA%20Aq%20Mam%20EA%2008-29-08_.pdf) on September 2, 2008. One public comment letter was received after review of the EA from an out-of-state organization. The letter was carefully reviewed for comments to identify substantial new issues, alternatives, or to re-direct the program. Based upon the comments, all the issues and alternatives were already addressed in the EA, or did not change the analysis in the EA. The letter is maintained in the administrative file located at the WS State Office in Olympia, Washington.

IX. MONITORING

The Washington WS program will annually provide to the WDFW the WS lethal take of target and non-target animals to help ensure the total statewide take (WS and other take) does not impact the viability of target and non-target wildlife species or management objectives of WDFW. In addition, the EA will be reviewed each year to ensure that it and the analysis are sufficient.

X. CONSISTENCY

The analyses in the EA demonstrate that Alternative 1: 1) best addresses the issues identified in the EA, 2) provides safeguards for public health and safety, 3) provides WS the best opportunity to reduce damage while providing low impacts on non-target species, 4) balances the economic effects to agricultural and natural resources, and property, and 5) allows WS to meet its obligations to government agencies or other entities.

FINDING OF NO SIGNIFICANT IMPACT

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this proposed action. I agree with this conclusion and therefore find that an EIS need not be prepared. This determination is based on the following factors:

1. Aquatic mammal damage management as conducted by Washington WS is not regional or national in scope.
2. The proposed action poses minimal risk to public health and safety. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1997, Appendix P).
3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. Built-in minimization measures are part of WS' standard operating procedures and adherence to laws and regulations will further ensure that WS activities do not harm the environment.
4. The effects on the quality of the human environment are not highly controversial. Although there maybe opposition to wildlife damage management, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.
6. The proposed action would not establish a precedent for any future action with significant effects.
7. No significant cumulative effects were identified through this assessment. The number of aquatic mammals removed by WS, when added to the total known other take of these species, falls within allowable harvest levels supported by the WDFW. The EA analyzed cumulative effects of WS on target and non-target species and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State.
8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. During an informal consultation process the USFWS and NMFS concurred that the proposed action would not likely adversely affect any federally listed T&E species. Further, the WDFW reviewed the EA and determined that the proposed action would not adversely affect Washington State listed T&E species.
10. The proposed action would be in compliance with all applicable Federal, State, and local laws.

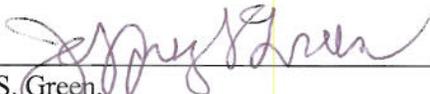
Decision and Rationale

I have carefully reviewed the EA prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 1 - Continue the Current WS Adaptive Aquatic Mammal Damage Management Program: (No Action/Proposed Alternative) and applying the associated minimization measures discussed in Chapter 3 of the EA. Alternative 1 is selected because: 1) it offers the greatest chance at maximizing effectiveness

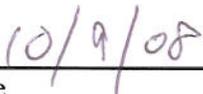
and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program; 2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, 3) it offers the best cost-effectiveness, and has the potential to even further reduce the current low level of risk to the public, pets, and T&E species, and 4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered.

WS will continue to use authorized aquatic mammal damage management methods in compliance with all the applicable minimization measures listed in Chapter 3 of the EA and State laws. I have also adopted the publicly reviewed "*Aquatic Mammal Damage Management in Washington State*" EA as the final. Therefore, it is my decision to implement the proposed action as described in the EA.

Copies of the EA are available upon request from the Washington Wildlife Services State Office, 720 O'Leary Street, NW., Olympia, WA 98502.



Jeffrey S. Green,
Regional Director
APHIS-WS Western Region



Date

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