DECISION

ENVIRONMENTAL ASSESSMENT: MAMMAL DAMAGE MANAGEMENT IN THE STATE OF RHODE ISLAND

PURPOSE

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program has prepared an Environmental Assessment (EA) to analyze the potential environmental and social impacts to the quality of the human environment from resolving damage, including conflicts and threats, to agricultural resources, property, natural resources, and human safety associated with mammals (USDA 2013). The EA documents the need for damage management in Rhode Island and assesses potential impacts on the human environment of three alternatives to address that need. The proposed action in the EA would continue an integrated methods approach to address the need to manage damage and threats associated with mammals.

The EA addressed damage and threats of damage associated with the coyote (*Canis latrans*), feral/free-ranging dog (*Canis familiaris*), red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), feral/free-ranging cat (*Felis domesticus*), bobcat (*Lynx rufus*), river otter (*Lontra canadensis*), fisher (*Martes pennanti*), mink (*Neovison vison*), long-tailed weasel (*Mustela frenata*), short-tailed weasel (*Mustela erminea*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), white-tailed deer (*Odocoileus virginianus*), Eastern cottontail (*Sylvilagus floridanus*), New England cottontail (*Sylvilagus transitionalis*), snowshoe hare (*Lepus americanus*), beaver (*Castor canadensis*), porcupine (*Erethizon dorsatum*), woodchuck (*Marmota monax*), gray squirrel (*Sciurus carolinensus*), red squirrel (*Tamiasciurus hudsonicus*), Southern flying squirrel (*Glaucomys volans*), Eastern chipmunk (*Tamias striatus*), muskrat (*Ondatra zibethicus*), black rat (*Rattus rattus*), Norway rat (*Rattus norvegicus*), woodland jumping mouse (*Napaeozapus insignis*), meadow jumping mouse (*Zapus hudsonius*), meadow vole (*Microtus pennsylvanicus*), woodland vole (*Microtus pinetorum*), Southern red-backed vole (*Myodes gapperi*), Southern bog lemming (*Synaptomys cooperi*), white-footed mouse (*Peromyscus leucopus*), short-tailed shrew (*Blarina brevicauda*), masked shrew (*Sorex cinereus*), smoky shrew (*Sorex fumeus*), American water shrew (*Sorex palustris*), star-nosed mole (*Condylura cristata*), hairy-tailed mole (*Parascalops breweri*), and Eastern mole (*Scalopus aquaticus*).

The EA evaluated the issues and alternatives associated with WS' potential participation in managing damage and threats caused by mammals in the State. The EA was prepared by WS to determine if the alternatives could have a significant impact on the quality of the human environment. Specifically, the EA was prepared to: 1) facilitate planning, 2) facilitate interagency coordination, 3) streamline program management, 4) evaluate the potential environmental consequences of the alternatives related to the issues associated with managing damage caused by mammals, and 5) clearly communicate to the public the analysis of individual and cumulative impacts.

NEED FOR ACTION

The need for action arises from requests for assistance received by WS to reduce and prevent damage associated with mammals from occurring to agricultural resources, natural resources, property, and threats to human safety. WS would only conduct mammal damage management after receiving a request for assistance. Before initiating activities, a Memorandum of Understanding, cooperative service agreement, or other comparable document would be signed between WS and the entity requesting assistance, which would list all the methods the property owner or manager would allow to be used on property they own and/or manage. WS may also be requested to participate in disease surveillance and monitoring in the event of a disease outbreak or potential outbreak in a mammal population.

SCOPE OF ANALYSES IN THE EA

The EA evaluates the need for action to manage damage associated with mammals, the potential issues associated with managing damage, and the environmental consequences of conducting different alternatives to meet the need for action while addressing the identified issues. The EA evaluates meeting the need for action under three alternative approaches. The methods available for use or recommendation under each of the alternatives evaluated were provided in Appendix B of the EA. The actions evaluated were the use of those methods available under the alternatives and the employment of those methods by WS to manage or prevent damage and threats associated with mammals. The standard WS Decision Model (Slate et al. 1992) would be the site-specific procedure for individual actions conducted by WS (see WS Directive 2.201).

Issues related to managing damage caused by mammals in Rhode Island were initially developed by WS in consultation with the Rhode Island Department of Environmental Management (RIDEM). Issues were defined and preliminary alternatives were identified through the scoping process. As part of the scoping process, the EA was made available to the public for review and comment by a legal notice published daily in the *Providence Journal* newspaper from February 28, 2013 through March 2, 2013. A notice of availability and the EA were also made available for public review and comment on the APHIS website at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml beginning on February 25, 2013. A letter of availability was also mailed directly to agencies, organizations, and individuals with probable interest in mammal damage management in the State. The public involvement process ended on April 1, 2013. WS did not receive comments related to the public comment period.

RELATIONSHIP OF THE EA TO OTHER ENVIRONMENTAL DOCUMENTS

WS has developed an EA that analyzed the environmental effects of WS' involvement in the funding of and participation in oral rabies vaccination programs to eliminate or stop the spread of raccoon rabies in a number of eastern states (including Rhode Island) and gray fox and coyote rabies in Texas (USDA 2005).

AUTHORITY AND COMPLIANCE

WS is authorized by law to reduce damage caused by animals through the Act of March 2, 1931 (46 Stat. 1468; 7 USC 426-426b), as amended and the Act of December 22, 1987 (101 Stat. 1329-331, 7 USC 426c). Management of mammal species in the State is the responsibility of the RIDEM. As the agency with authority for the management of mammals, the RIDEM was consulted during the development of the EA and provided input to ensure an interdisciplinary approach according to the National Environmental Policy Act (NEPA) and agency mandates, policies, and regulations.

The EA and this Decision ensure WS' actions comply with the NEPA, with the Council on Environmental Quality guidelines (40 CFR 1500), and with APHIS' NEPA implementing regulations (7 CFR 372). All activities, including disposal requirements, would be conducted consistent with: 1) the Endangered Species Act of 1973, 2) the Federal Insecticide, Fungicide, and Rodenticide Act, 3) the Clean Water Act, 4) the Food Security Act, 5) applicable Executive Orders, and 6) applicable Federal, State, and local laws, regulations, and policies, including WS' Directives.

DECISIONS TO BE MADE

Based on the scope of the EA, the decisions to be made are: 1) should WS conduct mammal damage management to alleviate damage to agriculture, property, natural resources, and threats to human safety, 2) should WS conduct disease surveillance and monitoring in mammal populations when requested by the RIDEM and other agencies, 3) should WS implement an integrated wildlife damage management

strategy, including technical assistance and direct operational assistance, to meet the need for mammal damage management in Rhode Island, 4) if not, should WS attempt to implement one of the alternatives to an integrated damage management strategy as described in the EA, and 5) would the proposed action or the other alternatives result in significant effects to the environment requiring the preparation of an Environmental Impact Statement (EIS).

AFFECTED ENVIRONMENT

Mammal damage or threats of damage can occur statewide in Rhode Island wherever those mammal species occur. However, mammal damage management would only be conducted by WS when requested by a landowner or manager and only on properties where a cooperative service agreement or other comparable document was signed between WS and a cooperating entity. Upon receiving a request for assistance, activities could be conducted on federal, State, tribal, municipal, and private properties in Rhode Island. Areas where damage or threats of damage could occur include, but would not be limited to agricultural fields, vineyards, orchards, farmyards, dairies, ranches, livestock operations, aquaculture facilities, fish hatcheries, grain mills, grain handling areas, railroad yards, waste handling facilities, industrial sites, natural resource areas, park lands, and historic sites; state and interstate highways and roads; railroads and their right-of-ways; property in or adjacent to subdivisions, businesses, and industrial parks; timberlands, croplands, and pastures; private and public property where burrowing mammals cause damage to structures, dikes, ditches, ponds, and levees; public and private properties in areas where mammals cause damage to landscaping and natural resources, property, and are a threat to human safety through the spread of disease. The area would also include airports and military airbases where mammals posed a threat to human safety and to property; areas where mammals negatively affect wildlife, including T&E species; and public property where mammals were negatively affecting historic structures, cultural landscapes, and natural resources.

ISSUES ASSOCIATED WITH MAMMAL DAMAGE MANAGEMENT ACTIVITIES

Issues related to mammal damage management in Rhode Island were defined and preliminary alternatives were identified by WS and through consultation with the RIDEM. The EA was also made available to the public for review and comment through notices published in local media and through direct notification of potentially interested parties.

Chapter 2 of the EA describes in detail the issues considered and evaluated in the EA (USDA 2013). The following issues were identified as important to the scope of the analysis (40 CFR 1508.25) with each alternative evaluated in the EA relative to the impacts on those major issues:

- Issue 1 - Effects of Damage Management Activities on Target Mammal Populations
- Issue 2 - Effects on Non-target Wildlife Species Populations, Including T&E Species
- Issue 3 - Effects of Damage Management Methods on Human Health and Safety
- Issue 4 - Effects on the Socio-cultural Elements of the Human Environment
- Issue 5 - Humaneness and Animal Welfare Concerns of Methods
- Issue 6 - Effects of Mammal Damage Management Activities on the Regulated Harvest of Mammals
- Issue 7 – Effects of Beaver Removal and Dam Manipulation on the Status of Wetlands in the State

ISSUES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE

In addition to those issues analyzed in detail, several issues were identified during the development of the EA but were not considered in detail. The rationale for the decision not to analyze those issues in detail was discussed in the EA. Those issues not analyzed in detail were:

- Appropriateness of Preparing an EA (Instead of an EIS) For Such a Large Area
- WS' Impact on Biodiversity
- A Loss Threshold Should Be Established Before Allowing Lethal Methods
- Mammal Damage Management Should Not Occur at Taxpayer Expense
- Cost Effectiveness of Management Methods
- Effectiveness of Mammal Damage Management Methods
- Mammal Damage Should Be Managed By Private Nuisance Wildlife Control Specialists
- Effects from the Use of Lead Ammunition in Firearms
- A Site Specific Analysis Should be Made for Every Location Where Mammal Damage Management Would Occur
- Effects on Human Health from Consumption of Meat Donated by WS

DESCRIPTION OF THE ALTERNATIVES

The following three alternatives were developed to respond to the issues identified in Chapter 2 of the EA (USDA 2013). A detailed discussion of the effects of the alternatives on the issues is described in the EA under Chapter 4; below is a summary of the alternatives.

Alternative 1 - Continue the Current Adaptive Integrated Mammal Damage Management Program (No Action/Proposed Action)

The proposed action would continue the current program of employing an integrated damage management approach using available methods, as appropriate, to reduce damage associated with mammals in the State. An integrated methods strategy would be recommended and used, encompassing the use of practical and effective methods of preventing or reducing damage while minimizing harmful effects of damage management measures on people, other species, and the environment. Non-lethal methods would be given preference in the formulation of each damage management strategy, and would be recommended or implemented when practical and effective before recommending or implementing lethal methods. However, non-lethal methods would not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or there could be instances where application of lethal methods alone would be the most appropriate strategy. Technical assistance provided under this alternative would be similar to technical assistance provided under Alternative 2.

All of the methods addressed in Appendix B of the EA would be available to WS for use to resolve requests for assistance to manage damage associated with mammals in the State. Using the WS Decision Model discussed in the EA, WS could employ methods singularly or in combination in an integrated approach to alleviate damage caused by mammals.

Alternative 2 – Mammal Damage Management by WS through Technical Assistance Only

Under Alternative 2, WS would address every request for assistance with technical assistance only. Technical assistance would provide those persons seeking assistance with information and recommendations on methods and techniques that those cooperators could implement without WS' direct

involvement in the action. Technical assistance could be provided through personal or telephone consultations and through site visits. Under this alternative, the immediate burden of resolving threats or damage associated with mammals would be placed on those persons requesting assistance. Those persons could employ those methods recommended by WS, could employ other methods, could seek further assistance from other entities, or could take no further action.

Similar to Alternative 1, those methods described in Appendix B would be available to those persons experiencing damage or threats associated with mammals in the State except for the use of Gonacon™, immobilizing drugs, and euthanasia chemicals. Under this alternative, Gonacon™ would only be available to the RIDEM[1], while immobilizing drugs and euthanasia chemicals would only be available to the RIDEM or appropriately licensed veterinarians. All other methods described in Appendix B of the EA would be available to those persons experiencing damage.

Alternative 3 – No Mammal Damage Management Conducted by WS

Under the no involvement alternative, WS would not be involved with any aspect of managing damage caused by mammals in Rhode Island. All requests for assistance received by WS would be referred to the RIDEM and/or other entities. Most of the methods described in Appendix B of the EA would be available under this alternative. The only methods that would not be available to manage damage caused by mammals under this alternative would be Gonacon™, immobilizing drugs, and euthanasia chemicals. Gonacon™ is not registered for use in Rhode Island and if registered, Gonacon™ would only be available for use by the RIDEM under this alternative and persons under their authority. Immobilizing drugs and euthanasia chemicals would only be available for use by the RIDEM or appropriately licensed veterinarians. All other methods described in Appendix B of the EA would be available to those persons experiencing damage.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE

Additional alternatives were also evaluated but were not considered in detail in the EA with rationale provided. The alternatives analyzed but not in detail included:

- Non-lethal Methods Implemented Before Lethal Methods
- Use of Non-lethal Methods Only by WS
- Use of Lethal Methods Only by WS
- Trap and Translocate Mammals Only
- Reducing Damage by Managing Mammal Populations through the Use of Reproductive Inhibitors
- Compensation for Mammal Damage
- Short Term Eradication and Long Term Population Suppression
- Bounties
- Trap-Neuter-Release Program for Feral and Free Ranging Cats and/or Dogs
- Use of Regulated Hunting and Trapping as a Management Tool

STANDARD OPERATING PROCEDURES FOR MAMMAL DAMAGE MANAGEMENT

The current WS program uses many standard operating procedures. Standard operating procedures were discussed in Chapter 3 of the EA (USDA 2013). Those standard operating procedures would be incorporated into activities conducted by WS under the proposed action alternative (Alternative 1) and

[1]Gonacon™ is not currently registered for use in the State.

when applicable, under the technical assistance alternative (Alternative 2). If the no involvement by WS alternative (Alternative 3) were selected, the lack of assistance by WS would preclude the employment or recommendation of those standard operating procedures addressed in the EA.

ENVIRONMENTAL CONSEQUENCES FOR ISSUES ANALYZED IN DETAIL

The EA analyzed the environmental consequences of each alternative as each of the alternatives related to the issues identified. The analysis provided information needed to make informed decisions when selecting the appropriate alternative to address the need for action. The following resource values in Rhode Island are not expected to be significantly impacted by any of the alternatives analyzed in the EA: soils, geology, minerals, water quality/quantity, flood plains, wetlands, critical habitats (areas listed in threatened and endangered (T&E) species recovery plans), visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range. The activities proposed in the alternatives would have a negligible effect on atmospheric conditions including the global climate. Meaningful direct or indirect emissions of greenhouse gases would not occur because of any of the alternatives. Those alternatives would meet the requirements of applicable laws, regulations, and Executive Orders, including the Clean Air Act and Executive Order 13514.

Chapter 4 of the EA analyzed the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on the major issues identified in the EA. The proposed action/no action alternative served as the baseline for the analysis and the comparison of expected impacts among the alternatives. The analyses also take into consideration mandates, directives, and the procedures of WS and the RIDEM. The analyses in Chapter 4 of the EA indicated the potential impacts to the quality of the human environment would be similar across the alternatives.

Issue 1 - Effects of Damage Management Activities on Target Mammal Populations

Under the proposed action, WS could incorporate non-lethal and lethal methods described in Appendix B of the EA in an integrated approach in which all or a combination of methods could be employed to resolve a request for assistance. WS could recommend and/or operationally employ both non-lethal and lethal methods, as governed by federal, state, and local laws and regulations under the proposed action. Similarly, WS could recommend the use of non-lethal and/or lethal methods under Alternative 2; however, WS would not provide direct operational assistance.

Non-lethal methods could be used to exclude, harass, disperse, or translocate target wildlife from areas where damage or threats were occurring. Non-lethal methods available under the alternatives could disperse or otherwise make an area unattractive to mammals that were causing damage, which could reduce the presence of those species at the site and potentially the immediate area around the site where non-lethal methods were employed. In addition, live-capture methods (*e.g.*, cage traps, foothold traps) could be employed to capture animals of the target species. Non-lethal methods would be given preference when addressing requests for assistance under Alternative 1 and Alternative 2. However, non-lethal methods would not necessarily be employed to resolve every request for assistance if deemed inappropriate by WS' personnel using the WS Decision Model, especially in situations where the requesting entity had already attempted to resolve the damage or threats of damage using non-lethal methods.

Non-lethal methods would generally be regarded as having minimal effects on overall populations of wildlife since those species would be unharmed. Non-lethal methods would not be employed over large geographical areas or applied at such intensity that essential resources (*e.g.*, food sources, habitat) would be unavailable for extended durations or over a wide geographical scope that long-term adverse effects

would occur to a species' population. The continued use of non-lethal methods often leads to the habituation of wildlife to those methods, which can decrease the effectiveness of those methods. When employed under the alternatives, lethal methods would often be employed to reinforce non-lethal methods and to remove those animals that have been identified as causing damage or posing a threat to human safety. The use of lethal methods could result in local reductions of animals in the area where damage or threats were occurring. Under the proposed action alternative, WS could be requested to provide direct operational assistance where WS employs lethal methods to remove target species. The number of individuals of each target species removed from the population annually by WS using lethal methods would be dependent on the number of requests for assistance received, the number of individuals involved with the associated damage or threat, and the efficacy of methods employed. The levels of estimated annual lethal take of target species addressed in the EA under the proposed action alternative were based on activities that were conducted to address previous requests for assistance. In addition, the estimated annual lethal take levels were based on additional efforts of WS to address those requests for assistance.

Mammals that could be taken by WS under the proposed action could be taken by those persons experiencing damage or threats in the absence of WS' direct involvement under the other alternatives since the take of mammals can occur when a permit has been issued by the RIDEM, when required. In addition, mammals could be lethally taken to alleviate damage or reduce threats by private businesses or during the regulated hunting and/or trapping seasons in the State. Since the lack of WS' direct involvement does not preclude the lethal take of mammals by those persons experiencing damage or by other entities, WS' involvement in the removal of those animals under the proposed action would not be additive to the number of animals that could be lethally removed by other entities in the absence of WS' involvement. The number of mammals lethally removed annually would likely be similar across the alternatives, since the lethal removal of mammals could occur even if WS was not directly involved with providing assistance under Alternative 2 and Alternative 3. Those activities proposed, including the proposed lethal removal of mammals under Alternative 1, would not be additive to the number of animals that could be removed by other entities under the other alternatives despite the lack of WS' involvement.

In addition, most non-lethal and lethal methods available for resolving damage or threats associated with mammals would be available under any of the alternatives. Gonacon™, immobilizing drugs, and euthanasia chemicals would be the only methods that would not be available under all of the alternatives. Based on the evaluation in the EA (USDA 2013), the availability of Gonacon™, immobilizing drugs, and euthanasia chemicals under the proposed action alternative would not pose significant environmental risks when used by trained personnel of WS and in accordance with their use guidelines.

Based on those quantitative and qualitative parameters addressed in the EA, the proposed levels of take for each mammal species addressed under the proposed action alternative (Alternative 1) would be considered of low magnitude when compared to population trend data, population estimates, and/or harvest data. The number of mammals lethally taken annually under the alternatives would likely be similar since the take of mammals could occur despite no involvement by WS. WS does not have the authority to regulate the number of mammals taken annually by other entities.

In addition, based on the levels of take that have occurred previously by WS and by other entities, the cumulative take levels addressed would also be of low magnitude when compared to those quantitative and qualitative parameters addressed in the EA. The permitting of take by the RIDEM ensures that cumulative take levels would occur within allowable levels to maintain species' populations and meet population objectives for each species.

Issue 2 - Effects on Non-target Wildlife Species Populations, Including T&E Species

Another issue often raised is the potential impacts to populations of wildlife that could be taken as non-targets during damage management activities: While efforts would be made to minimize the risks of lethally taking non-target wildlife, the potential does exist for the unintentional take of non-targets during damage management activities.

The non-targets taken previously by WS are representative of non-targets that could be lethally taken by WS under the proposed action alternative. Although additional species of non-targets could be lethally taken by WS, the lethal removal of individuals from any species is not likely to increase substantively above the number of non-targets taken annually by WS during previous damage management activities. In addition, many of the species lethally taken or live-captured from FY 2006 through FY 2011 were also considered target species in the EA and the level of take analyzed for each species under Issue 1 included non-target take that could occur by WS.

The capture and limited lethal take that could occur during other damage management activities was further addressed in the ORV program EA (USDA 2005). However, non-targets captured and lethally taken by WS as part of those damage management activities were also addressed in the EA to ensure a cumulative evaluation of potential effects on non-target populations. Therefore, the take of those species was evaluated cumulatively under Issue 1, including take that could occur when a species was considered a target or non-target.

Under the no involvement by WS alternative, WS would not be directly involved with any aspect of managing damage associated with mammals; therefore, no direct impacts to non-targets would occur from WS. Under the technical assistance only alternative, WS could provide information on the proper use of methods and provide demonstration on the use of methods but would not be directly involved with using methods to alleviate mammal damage or threats. Similar to the no WS involvement alternative, under the technical assistance alternative, if methods were applied as intended and with regard for non-target hazards by other entities, those methods would not result in the decline of non-target species' populations. If requesters were provided technical assistance but did not implement any of the recommended actions and took no further action, the potential impacts to non-targets would be lower compared to the proposed action. If those persons requesting assistance implemented recommended methods appropriately and as instructed or demonstrated, the potential impacts to non-targets would be similar to the proposed action. Methods or techniques not implemented as recommended or used inappropriately would likely increase risks to non-targets. When employing direct operational assistance under the proposed action alternative, WS could employ methods and use techniques that would avoid non-target take as described in Chapter 3 of the EA under the standard operating procedures.

The ability to reduce damage and threats caused by mammals would be variable and would be based upon the skills and abilities of the person implementing damage management actions under Alternative 2 and Alternative 3. If those methods available were applied as intended, risks to non-targets would be minimal to non-existent. If methods available were applied incorrectly or applied without knowledge of wildlife behavior, risks to non-target wildlife would be higher under any of the alternatives. If frustration from the lack of available assistance under Alternative 2 and Alternative 3 caused those persons experiencing mammal damage to use methods that were not legally available for use, risks to non-targets would be higher under those alternatives. People have resorted to the use of illegal methods to resolve wildlife damage that have resulted in the lethal take of non-target wildlife. Under the proposed action alternative, those persons could request direct operational assistance from WS to reduce damage and threats occurring, which would increase the likelihood that non-target species would be unaffected by damage management activities.

The New England Field Office of the United States Fish and Wildlife Service has developed a website that provides up-to-date species occurrence information and provides an outline for action agencies to assist in determining whether consultation for projects is needed under Section 7 of the Endangered Species Act (ESA). Based on review of the website, if T&E species were not present in the project area, WS would conclude the project would have "*no effect*" on T&E species. The no effect determination would be based on the absence of those species in the project area; therefore, no further consultation would occur with the USFWS as indicated by the website and pursuant to Section 7 of the ESA. If, after review of the procedures on the website, WS determines T&E species may be present in a project area based on information provided on the website, WS would follow those procedures outlined on the website to conclude with a determination of effects and the need for further consultation pursuant to Section 7.

Based on the review of species listed by the RIDEM, WS has determined that the proposed activities would not adversely affect those species currently listed by the State. Any activity involving State listed mammals being analyzed in this EA, specifically, the state threatened bobcat and species of concern, such as the New England cottontail, Southern bog lemming, smoky shrew and water shrew, would require prior authorization by the RIDEM through permitting or specific authorization. There is no formal regulatory protection, except for bobcats and New England cottontails for which there are closed or regulated seasons under hunting and trapping regulations and for purposes of research or other purposes could be collected or taken under the appropriate permit issued by the RIDEM. For instance, if someone wanted to conduct a small mammal survey, or other research project (C. Brown, RIDEM pers. comm. 2012). The RIDEM has concurred with WS' determination for listed species in the State. WS would comply with all regulations and requirements in accordance with WS Directive 2.210.

Issue 3 - Effects of Damage Management Methods on Human Health and Safety

The threats to human safety from methods available would be similar across the alternatives since those methods would be available across the alternatives. However, the expertise of WS' employees in using those methods available likely would reduce threats to human safety since WS' employees would be trained and knowledgeable in the use of those methods. If methods were used incorrectly or without regard for human safety, risks to human safety would increase under any of the alternatives that those methods could be employed. The EA determined that the availability of Gonacon™, immobilizing drugs, and euthanasia chemicals would not increase risks to human safety from the use of those methods under the proposed action alternative (USDA 2013). Although risks do occur from the use of Gonacon™, immobilizing drugs, and euthanasia chemicals, when those methods were used in consideration of human safety, the use of those methods would not pose additional risks beyond those associated with the use of other methods. No adverse effects to human safety occurred from WS' use of methods to alleviate mammal damage in the State from FY 2006 through FY 2011. The risks to human safety from the use of non-lethal and lethal methods, when used appropriately and by trained personnel, would be considered low.

Issue 4 - Effects on the Socio-cultural Elements of the Human Environment

Mammals often provide aesthetic enjoyment to many people in the State through observations, photographing, and knowing they exist as part of the natural environment. Methods available that could be employed under each of the alternatives could result in the dispersal, exclusion, or removal of individuals or small groups of mammals to resolve damage and threats. Therefore, the use of methods often results in the removal of mammals from the area where damage was occurring or the dispersal of mammals from an area. Since methods available for use to manage damage would be similar across the alternatives, the use of those methods would have similar potential impacts on the aesthetics of mammals. However, the dispersal and/or lethal take of mammals under the alternatives, even under the proposed action alternative, would not reach a magnitude that would prevent the ability to view mammals outside

of the area where damage was occurring. The effects on the aesthetic values of mammals would therefore be similar across the alternatives and would be minimal.

Issue 5 - Humaneness and Animal Welfare Concerns of Methods

The issue of humaneness was also analyzed in relationship to methods available under each of the alternatives. Since many methods addressed in Appendix B of the EA would be available under all the alternatives, the issue of method humaneness would be similar for those methods across all the alternatives. As stated previously, Gonacon™, immobilizing drugs, and euthanasia chemicals would be the only methods that would not be available to all entities under the alternatives. The ability of WS to provide direct operational assistance under the proposed action alternative would ensure methods were employed by WS as humanely as possible. Under the other alternatives, methods could be used by other entities inhumanely if used inappropriately or without consideration of mammal behavior. However, the efficacy of methods employed by a cooperator would be based on the skill and knowledge of the requester in resolving the threat to safety or damage situation despite WS' demonstration. A lack of understanding of the behavior of mammals or improperly identifying the damage caused by mammals along with inadequate knowledge and skill in using methodologies to resolve the damage or threat could lead to incidents with a greater probability of being perceived as inhumane under Alternative 2 and Alternative 3. Despite the lack of involvement by WS under Alternative 3 and WS' limited involvement under Alternative 2, those methods perceived as inhumane by certain individuals and groups would still be available to the public to use to resolve damage and threats caused by mammals.

Issue 6 - Effects of Mammal Damage Management Activities on the Regulated Harvest of Mammals

Hunting and/or trapping seasons in the State exist for most of the mammal species addressed in the EA. Those species addressed in this EA that have established hunting and/or trapping seasons include coyote, gray fox, red fox, striped skunk, raccoon, fisher, mink, long-tailed weasel, short-tailed weasel, Eastern cottontail, New England cottontail, snowshoe hare, gray squirrel, muskrat, beaver, Virginia opossum, and white-tailed deer. WS would have no impact on the ability to harvest those species during the annual hunting and/or trapping seasons under Alternative 2 and Alternative 3 since WS would not be directly involved with managing damage associated with those species. However, resource/property owners may remove mammals under permits issued by the RIDEM, when required, resulting in impacts similar to the proposed action alternative under Alternative 2 and Alternative 3. The recommendation of non-lethal methods could disperse or exclude mammals from areas under any of the alternatives, which could limit the ability of those persons interested to harvest mammals in the damage management area. However, the populations of mammals would be unaffected directly by WS under the technical assistance alternative (Alternative 2) and the no involvement alternative (Alternative 3). The RIDEM could continue to regulate mammal populations through adjustments in allowed take during the regulated harvest season and through permits to manage damage or threats of damage.

The magnitude of lethal take addressed in the proposed action would be low when compared to the mortality of those mammal species from all known sources. When WS' proposed take of mammals was included as part of the known mortality of mammals and compared to the best population information available for those species, the impact on a species' population was below the level of removal required to lower population levels. The RIDEM would determine the number of mammals taken annually through the issuance of permits, when required, and by adjusting allowed take during the harvest seasons.

With oversight by the RIDEM, the number of mammals taken by WS would not limit the ability of those persons interested to harvest mammals during the regulated season. All take by WS would be reported to the RIDEM annually to ensure take by WS was incorporated into population management objectives established for mammal populations. Based on the limited take proposed by WS and the oversight by the

RIDEM, WS' take annually would have no effect on the ability of those persons interested to harvest mammals during the regulated harvest season.

Issue 7 – Effects of Beaver Removal and Dam Manipulation on the Status of Wetlands in the State

If a beaver dam is not breached and water is allowed to stand, hydric soils and hydrophytic vegetation may eventually form. This process can take anywhere from several months to years depending on pre-existing conditions. Hydric soils are those soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions. In general, hydric soils form much easier where wetlands have preexisted. Hydrophytic vegetation includes those plants that grow in water or on a substrate that is at least periodically deficient in oxygen because of excessive water content. If these conditions are met, then a wetland has developed that would have different wildlife habitat values than an area that has been more recently impounded by beaver dam activity.

The intent of dam breaching or removal is not to drain established wetlands. With few exceptions, requests from public and private individuals and entities that WS receives involve dam breaching or removal to return an area back to its pre-existing condition shortly after the dam was created. If the area does not have hydric soils, it usually takes many years for them to develop and a wetland to become established. The regulatory definition of a wetland (see 40 CFR 232.2) is "*...areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*"

Under the proposed action alternative, WS could recommend and/or implement methods to manipulate water levels associated with water impounded by beaver dams to alleviate flooding damage. If the technical assistance alternative was selected, WS could recommend methods to people requesting assistance that could result in the manipulation of water levels associated with water impounded by beaver dams. WS would not be involved with any aspect of activities associated with beaver dams under the no involvement by WS alternative. Methods that would generally be available under all the alternatives would include exclusion devices and water flow devices (see Appendix B of the EA for additional information). Dams could also be breeched or removed using hand tools (*e.g.*, hand rakes). In addition, the use of backhoes or other mechanical methods could be employed by property owners or managers to remove or breach beaver dams under any of the alternatives; however, WS would not operationally employ backhoes or other large machinery to remove or breach dams.

WS' personnel would determine the proper course of action upon inspecting a beaver dam impoundment (see Appendix E of the EA). The activities of WS to manage flooding damage by manipulating beaver dams would not be expected to have any cumulative adverse effects on wetlands in Rhode Island when conducted in accordance with the Clean Water Act and the Swampbuster provision of the Food Security Act.

CUMULATIVE IMPACTS OF THE PROPOSED ACTION

No significant cumulative environmental impacts were identified from any of the three alternatives, including the proposed action. Under the proposed action, the lethal removal of mammals by WS would not have significant impacts on statewide mammal populations when known sources of mortality were considered. The unintentional take of non-targets would not reach a magnitude where significant cumulative effects would occur to a species' population. No significant risks to public safety were identified under Alternative 1 and Alternative 2 since only trained and experienced personnel would conduct and/or recommend damage management activities. There could be a slight increased risk to public safety when persons who reject assistance and recommendations conducted their own activities

under Alternative 2, and when no assistance was provided under Alternative 3. However, under all of the alternatives, those risks would not be to the point that the effects would be significant. Activities conducted pursuant to the alternatives would not be expected to have any significant cumulative effects on the socio-cultural elements and economics of the human environment. WS would employ methods as humanely as possible by applying standard operating procedures to minimize pain and that allow wildlife captured to be addressed in a timely manner to minimize distress under the proposed action alternative. The lethal removal of target mammal species by WS annually to alleviate damage would be a minor component to the known take that occurs annually during the harvest seasons. With oversight of mammal take, the RIDEM maintains the ability to regulate take by WS to meet management objectives for mammals in the State. Therefore, the cumulative take of mammals would be considered as part of the RIDEM objectives for mammal populations in the State. The activities of WS to manage flooding damage by manipulating beaver dams would not be expected to have any cumulative effects on wetlands in Rhode Island when conducted in accordance with the Clean Water Act and the Swampbuster provision of the Food Security Act. The analysis in the EA indicates that an integrated approach to managing damage and threats caused by mammals would not result in significant cumulative effects on the quality of the human environment.

DECISION AND RATIONALE

Based on the analyses in the EA of the alternatives developed to address those issues, including individual and cumulative impacts of those alternatives, the following decision has been reached:

Decision

I have carefully reviewed the EA prepared to meet the need for action. I find the proposed action alternative (Alternative 1) to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA adequately addresses the identified issues, which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human environment are likely to occur from the proposed action, nor does the proposed action constitute a major federal action. Therefore, the analysis in the EA does not warrant the completion of an EIS.

Based on the analyses in the EA, the issues identified are best addressed by selecting Alternative 1 (proposed action/no action) and applying the associated standard operating procedures discussed in Chapter 3 of the EA. Alternative 1 successfully addresses (1) mammal damage management using a combination of the most effective methods and does not significantly impact the environment, property, human health and safety, target species, and/or non-target species, including T&E species; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse effects to public health and safety; and (4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. Further analysis would be triggered if changes occurred that broaden the scope of damage management activities in the State, that affected the natural or human environment, or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action/no action alternative (Alternative 1) as described in the EA.

Finding of No Significant Impact

Based on the analyses provided in the EA, there are no indications that the proposed action (Alternative 1) would have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an EIS should not be prepared. This determination is based on the following factors:

1. Mammal damage management, as conducted by WS in the State, would not be regional or national in scope.

2. The proposed action would pose minimal risk to public health and safety. Based on the analyses in the EA, the methods available would not adversely affect human safety based on their use patterns and standard operating procedures.

3. There were no unique characteristics such as parklands, prime farmlands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. WS' standard operating procedures and adherence to applicable laws and regulations would further ensure that WS' activities would not harm the environment.

4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to mammal 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 the assessment. The EA analyzed cumulative effects and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State of Rhode Island.

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. WS would review the USFWS website and the online measures described on the website on a site-by-site basis to determine if any T&E species were located within the project area in order to conclude with a determination of effects. Based on a determination of effects, WS would consult with the USFWS in accordance with the Endangered Species Act, if required. In addition, WS has determined that the proposed activities would not adversely affect State-listed species.

10. The proposed action would comply with all applicable federal, State, and local laws.

11. No significant cumulative effects were identified by this assessment or other actions implemented or planned within the area.

Rationale

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) mammal damage management would only be conducted by WS at the request of landowners/managers, 2) management actions would be consistent with applicable laws, regulations, policies and orders, and 3) no significant effects to the environment were identified in the analysis. As a part of this Decision, the WS program in Rhode Island would continue to

provide effective and practical technical assistance and direct management techniques that reduce damage and threats of damage.

4/8/13

Charles S. Brown, Director-Eastern Region
USDA/APHIS/WS
Raleigh, North Carolina

Date

LITERATURE CITED

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