United States
Department
of Agriculture

Animal and Plant Health
Inspection Service
Wildlife Services

FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION
FOR
PREDATOR DAMAGE MANAGEMENT
ON FEDERAL PUBLIC LANDS
IN ARIZONA

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS), Wildlife Services (WS) program responds to a variety of requests for assistance from individuals, organizations and agencies experiencing damage caused by wildlife in Arizona. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions are categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). However, an environmental assessment (EA) was prepared in this case to facilitate planning, interagency coordination, and the streamlining of program management, and to clearly communicate with the public the analysis of cumulative impacts. The predecisional EA released by WS in December 1998 documented the need for predator damage management (PDM) on federal public lands in Arizona and assessed potential impacts of various alternatives for responding to predator damage problems.

WS's proposed action was to allow the use of the full range of predator damage management methods currently authorized on federal public lands in the State for the protection of livestock, property, designated wildlife species, and public safety. With the passage of Proposition 201, lethal methods on such lands are currently restricted to ground-based and aerial shooting except for extremely limited situations involving human health and safety, wildlife disease surveillance, scientific research, or wildlife relocation. Because of Proposition 201, lethal methods employed by WS in nearly all cases under the proposed action are virtually 100% selective for target species.

Public Involvement

Following interagency review of a preliminary draft of the EA, a predecisional EA was prepared and released to the public for a 30-day comment period. Notice of availability of the predecisional EA was also published in three major newspapers in the State on December 1, 1998. A total of four comment letters were received in response to the predecisional EA. In addition, further agency comments were received from the Arizona Game and Fish Department (AGFD). Several editorial changes have been made to the EA and it is now available in final form. Although many concerns raised were already addressed in the EA, some of the comments indicated areas that warranted additional clarification or treatment. These are:

1. An EIS instead of an EA is required.

The purpose of an EA is to determine whether an EIS is necessary (40 CFR 1501.3 and 1501.4). As stated on page 1-1 of the EA, APHIS NEPA implementing procedures allow for individual wildlife damage management actions of the kind described in the EA to be categorically excluded from the requirement for preparation of either an EIS or an EA (7 CFR 372.5(c), 60 Fed Reg. 6,000-6,003, 1995). Nevertheless, this EA was prepared to facilitate planning, interagency coordination, and the streamlining of program management, and to clearly communicate with the public the analysis of cumulative impacts. The WS program has determined that an EIS is not required and that preparation of an EA for the program on federal public lands in Arizona complies with NEPA, the Council on Environmental Quality (CEQ) NEPA implementing regulations (40 CFR 1500), and with APHIS NEPA implementing regulations (7 CFR 372).

By this decision and FONSI, I have determined that an EIS is not necessary.

2. One commentor stated that the EA violates section 7 of the Endangered Species Act (ESA) by failing to consider and implement recommendations of the U.S. Fish and Wildlife Service (USFWS). The commentor quoted the USFWS that "Section 7 of the ESA requires a biological assessment should be completed for each of the listed species and should be included in the EA."

The EA contains a detailed discussion of T&E species that may occur in the areas of the proposed action, and analysis in the EA led to the conclusion that the proposed action would have no adverse effects on T & E species (See sections 2.2.2 & 4.2.2). It references the 1992 Biological Opinion from USFWS that establishes reasonable and prudent measures and/or alternatives that WS follows to avoid adverse impacts on a majority of the listed species, as well as a pending formal Section 7 consultation covering several other of the listed species that were not included in the 1992 consultation. Section 7 of the ESA and 50 CFR Part 402 only require biological assessments for "major construction activities." WS PDM actions do not involve major construction activities. Therefore, it is my determination that WS has met its responsibilities under the ESA with regard to the proposed action.

3. One commentor stated that the EA fails to consider that lethal control is "wholly inappropriate for . . . areas of critical environmental concern, research natural areas, and wilderness areas and other special recreation areas", and that failure to consider an alternative which allows lesser control in those areas is not only a procedural violation of NEPA but may be a substantive violation of the mandates and policies which guide management of these areas. The commentor further stated that WAs should be sanctuaries for native wildlife.

Sections 2.3.1, and 3.2.1 of the EA discuss the issue of WS PDM activity in WAs and WSAs. The EA states that WDM is only conducted in designated WAs or Wilderness Study Areas (WSAs) when allowed by the legislation designating the WA or under regulations and/or policies developed by the Forest Service or BLM. WDM in these designated areas is only, and is expected to continue to be, a minor part of the current program. Currently, sport hunting and predator damage management by private individuals using firearms and trail hounds is allowed by federal land management agencies and the AGFD in most WAs and WSAs. Thus, there is no inherent reason to impose special restrictions on actions involving similar types of methods in such areas by WS personnel.

The EA did not specifically address areas such as "Areas of Critical Environmental Concern" (ACECs) and other types of "Special Management Areas" (SMAs). ACECs and SMAs are areas managed for the protection of certain qualities or values such as biological, riparian, cultural, historic, scenic, geological, paleontological, recreation, rangeland, or sensitive plant species. In general, PDM has not been needed in these types of areas. However, it may be conducted on such areas if a need arises. Similar to WAs and WSAs, sport hunting and PDM by private individuals using firearms and trail hounds is not subject to additional restrictions in these areas. The BLM and FS are responsible for identifying any conflicts that PDM might have with the management of any of these types of areas during the Work Plan process. If, for example, the respective federal land management agency determines that an area with special management emphasis is to be closed to hunting or the use of firearms or to any and all low level flights, then WS would be subject to that restriction unless provided a special exemption.

When the need arises, restrictions on methods in these areas may be established if appropriate during the Work Plan process. WS recognizes that some persons interested in special management areas (particularly wilderness) may consider any PDM activities to adversely affect the aesthetic quality of the wilderness experience.

4. One commentor felt that the EA fails to justify the need for predator damage management activities, and that the occurrence of past predator damage does not justify future activities.

The EA contains an extensive discussion of the need for the proposed action in section 1.1. That section presents data showing that predation losses of livestock have occurred on federal public land in the State. It also presented information that predation has been in some cases, and could be in others, a limiting factor for some wildlife populations managed by the AGFD. The EA was clear in stating that it would be the responsibility of the AGFD to determine if PDM is needed on federal public lands to help them reach a management objective for a wildlife

population (see section 1.1.3). Section 1.1 also presented information showing that human health and safety can be adversely affected by predator species and that PDM may be needed in certain cases to protect human health and safety. PDM, and, in fact, all wildlife damage management, is conducted based on past experience and professional judgement that damage will occur in the absence of some measure to prevent it. That the need for PDM is supported by the determination that losses are threatened, rather than actually occurring at the time, is supported by a court case cited in the EA (U. S. District Court of Utah, Civil No. 92-C-0052A, Southern Utah Wilderness Alliance et al. v. Thompson, H. et al., Forest Supervisor), in which the court ruled that, " . . . *to establish need for an ADC, the forest supervisors need only show that damage from predators is threatened.*" WS believes it is reasonable to conclude that past losses to predators are an indication that future losses are likely to occur and that this clearly establishes the need for PDM when such losses are expected.

5. One commentor stated the EA violates NEPA by failing to adequately address the cost-benefit analysis of the proposed action.

The EA discusses costs vs. benefits in section 2.3.10. As stated therein, the Council on Environmental Quality (CEQ) regulations (40 CFR 1502.23) do not require a formal, monetized cost-benefit analysis to comply with NEPA. The EA cited the ADC EIS which stated that constraints, such as environmental protection, land management goals, and others, increase the cost of the WS program while not necessarily increasing its effectiveness. For this reason, the EIS concluded that cost effectiveness is not, nor should it be, the primary goal of the program.. Some resources protected, such as human health and safety, T&E species, and other wildlife populations, are difficult to value monetarily, which can make cost-benefit analysis next to impossible. Thus, in the case of this EA, and, for that matter, most WS EAs, cost-effectiveness is not necessary to a reasoned choice among alternatives. Nevertheless, for livestock protection, the Arizona WS program addressed the question of whether the value of avoided losses exceeds the cost of PDM service in the Decision issued on a statewide EA for PDM on Nonfederal and Tribal lands in Arizona (USDA 1996). That analysis, incorporated by reference in the current EA, indicated the value of avoided losses probably exceeds PDM costs by more than 4 to 1.

Major Issues

Cooperating agencies and the public helped identify a variety of issues deemed relevant to the scope of this EA. These issues were consolidated into the following 5 primary issues to be considered in detail:

1. Impact on target species populations.
2. Impact on nontarget species populations, including Threatened, Endangered and sensitive species.
3. The potential for coyote take to cause increases in rodent, rabbit, and other prey species populations to the point that detrimental effects on vegetation resources occur.
4. Impact on public use of public lands.
5. Humaneness and selectivity of WS predator damage management methods.

Alternatives Analyzed in Detail

Six potential alternatives were developed to address the issues identified above. Seven additional alternatives were considered but not analyzed in detail. A detailed discussion of the anticipated effects of the alternatives on the objectives and issues is described in Chapter 4 of the EA. The following summary provides a brief description of each alternative and its anticipated impacts.

Alternative 1. Continuation of Current Program (No Action). Consideration of the No Action alternative is required under 40 CFR 1502.14(d), and provides a baseline for comparing the potential effects of all the other alternatives. This alternative consists of using all currently authorized control methods in an integrated approach to resolve predator damage problems on federal public lands in the State as restricted by Proposition 201. Control actions may be initiated under either a corrective or preventive strategy, in response to current or historic livestock losses. Alternative 1 benefits individual resource owners/managers, while resulting in only low levels of impact on

wildlife populations, minimal potential to adversely impact ecosystems, very low risks to or conflicts with the public, and low risk to T&E species. Current lethal methods available for use on federal public lands are virtually 100% selective for target species and appear to present a balanced approach to the issue of humaneness when all facets of the issue are considered.

Alternative 2. No Federal WS Predator Damage Management. This alternative would consist of no federal involvement in PDM in the analysis area -- neither direct operational management assistance nor technical assistance to provide information on nonlethal and/or lethal management techniques would be available from WS. A portion of the formerly federal PDM responsibility would be born by the remaining state agency programs. Private individuals would increase their efforts which would mean more PDM would be conducted by persons with less experience and training, and with little oversight or supervision. Lethal controls by agencies and private individuals would be subject to the restrictions of Proposition 201. Risks to the public and risks to T&E species would probably be greater than under Alternative 1, and effectiveness and selectivity would probably be lower. Perceived conflicts with recreational public land users would be less.

Alternative 3. Technical Assistance Only. Under this alternative, WS would not provide any direct control assistance to persons experiencing predator damage problems, but would instead provide only advice, recommendations, and limited technical supplies and equipment. Predator damage management would likely be conducted by persons with little or no experience and training, and with little oversight or supervision. Risks to or conflicts with the public and risks to T&E species would probably be about the same as Alternative 1 but slightly less than or about the same as Alternative 2, and effectiveness and selectivity would probably be lower. Perceived conflicts with recreational public land users would be less than Alternative 1.

Alternative 4. Nonlethal PDM Only. This alternative would allow no use of lethal methods by WS as described under the proposed action. Producers and state agencies would still have the option of implementing their own lethal control measures within the restrictions imposed by Proposition 201. Risks to or conflicts with the public and risks would be about the same as Alternative 1. Risks to T&E species would probably be somewhat greater than Alternative 1 but slightly less than or about the same as Alternative 2. Program effectiveness would probably be lower than Alternatives 1 and 5. Selectivity of PDM activities would likely be less than Alternative 1 if reduced effectiveness leads to greater PDM efforts by less experienced and proficient private individuals, but greater than Alternatives 2 and 3. Perceived conflicts with recreational public land users would be less than Alternative 1.

Alternative 5. Nonlethal Control Required Before Lethal. This alternative would allow no use of lethal methods by WS as described under the proposed action until nonlethal methods have been employed in a given damage situation and found to be ineffective or inadequate. No preventive lethal control would be allowed. Producers and state agencies would still have the option of implementing some lethal control measures without a requirement that nonlethal methods be conducted first in accordance with the restrictions imposed by Proposition 201. Risks to or conflicts with the public and risks to T&E species would probably be about the same as Alternative 1 but slightly less than or about the same as Alternative 2. Program effectiveness would probably be lower than Alternative 1, but greater than Alternatives 2, 3, and 4. Selectivity of PDM activities would likely be less than Alternative 1 if reduced effectiveness leads to greater PDM efforts by less experienced and proficient private individuals, but greater than Alternatives 2, 3, and 4. Perceived conflicts with recreational public land users would be similar to Alternative 1.

Alternatives considered but not analyzed in detail were:

1. **Corrective Control Only When Lethal PDM Methods are Used.** This alternative would require that livestock losses or other resource damage by predators must be presently occurring, or must have occurred recently enough to predict that the loss or damage will continue to occur in the near future, before any lethal PDM methods could be used. This alternative was eliminated from further analysis because it has been what the current program already practices on federal public lands when livestock is the protected resource; it is not practical or acceptable when public health or safety or threatened/endangered species are the resources being protected; and it would preclude most types of other wildlife protection projects such as coyote management to enhance fawn survival of deer and antelope.

2. **Compensation for Predator Damage Losses.** The Compensation alternative would require the establishment of a system to reimburse persons impacted by predator damage. This alternative was eliminated from further analysis because no federal or state laws currently exist to authorize such action and because of other drawbacks discussed in the EA and the WS FEIS.

3. **Bounties.** Bounties are payment of funds for killing predators of certain species that cause or are suspected of causing economic losses. This alternative was eliminated from further analysis because it is not supported by Arizona State agencies such as AGFD and ADA nor is it supported by WS because of problems discussed in the EA.

4. **Eradication and Long Term Population Suppression.** An eradication alternative would direct all WS program efforts toward total long term elimination of coyotes and perhaps other predator species within large defined areas or across the entire analysis area. This alternative was eliminated from further analysis because WS, AGFD, and ADA oppose eradication of any native wildlife species, and because it is generally impossible to achieve. Long term population suppression is not a desired goal of state agencies or of WS for the analysis area as a whole but could be implemented for localized areas prone to predator damage under the current program alternative. The impacts of localized population suppression are analyzed in the EA.

5. **The Humane Society of the United States (HSUS) Alternative.** This alternative would require that: 1) "permittees evidence sustained and ongoing use of nonlethal/husbandry techniques aimed at preventing or reducing predation prior to receiving the services of the WS Program"; 2) "employees of the WS Program use or recommend as a priority the use of appropriate nonlethal techniques in response to a confirmed damage situation"; 3) "lethal techniques be limited to calling and shooting and ground shooting, and used as a last resort when use of husbandry and/or nonlethal controls have failed to keep livestock losses below an acceptable level"; and 4) "establish higher levels of acceptable loss levels on public lands than for private lands." This alternative was not considered in detail because the proposed action already embodies the first two components of the HSUS alternative, the detailed analysis contained in the EA includes most facets of the HSUS proposal, and it is believed that inclusion of this alternative would not contribute new information or options for consideration and analysis that are not already being considered and available in IWDM as used by WS.

6. **Lithium Chloride as an Aversive Agent.** Aversive conditioning with lithium chloride baits was not considered in detail as an alternative because the efficacy of the technique remains unproven, and the chemical is not registered (and thus not legal) for this use.

7. **Antifertility Agents for Coyote Population Control.** This alternative was eliminated from detailed analysis because antifertility agents have not yet been proven to be effective or safe to use, and none are currently legal for use.

8. **Rely on Private Fur Harvesters to Reduce Coyote Depredation on Livestock.** This alternative was eliminated from detailed analysis because private fur harvesters cannot be expected to necessarily operate in areas where depredation occurs but tend to focus on areas with high coyote populations. Other concerns are expressed in the EA.

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. Predator damage management, as conducted by WS on federal public lands in Arizona, is not regional or national in scope.

2. The proposed action would pose minimal risk to public health and safety. No injuries to any member of the public are known to have resulted from WS activities on federal public lands in Arizona.

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.

4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to predator control, this action is not highly controversial in terms of size, nature, or effect.

5. Based on the analysis documented in the EA, the effects of the proposed predator 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 on the quality of the human environment were identified through this assessment. The number of animals of any of the species taken by WS added to the total known other take of such species is either within levels sustainable by populations or is within levels authorized or desired by the responsible State agencies that represent the State's interests.

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. An evaluation of the proposed action and its effects on T&E species determined that no significant adverse effects would occur to such species.

10. The proposed action would be in compliance with all Federal, State, and local laws imposed for the protection of the environment.

Decision

I have carefully reviewed the EA and the input resulting from the public involvement process. I believe the issues and objectives identified in the EA would be best addressed through implementation of Alternative 1 (continuing the current program). Alternative 1 is therefore selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to affected resource owners and managers within current program funding constraints; (2) it will maximize selectivity of methods available; (3) it offers a balanced approach to the issue of humaneness when all facets of the issue are considered; (4) it will continue to minimize risk to or conflicts with the public; and (5) it will minimize risks to nontarget and T&E species. WS will continue to use an IWDM approach in compliance with all the applicable mitigation measures listed in Chapter 3 of the EA.

For additional information regarding this decision, please contact Steve Fairaizl, USDA-APHIS-WS, 2224 W. Desert Cove, #209, Phoenix, AZ 85029, 602-870-2081.

Michael V. Worthen, Regional Director
APHIS-WS Western Region

1-14-99
Date