

**DECISION AND FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT:
BIRD DAMAGE MANAGEMENT IN ARIZONA
MAY 2022**

PURPOSE AND NEED FOR ACTION

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services Arizona (WS-Arizona) prepared an Environmental Assessment (EA) "Bird Damage Management in Arizona" to analyze the potential impacts to the quality of the human environment from conducting bird damage management (BDM) in the state of Arizona (USDA 2022). The EA and this Decision ensure WS-Arizona complies with the National Environmental Policy Act (NEPA), with the Council on Environmental Quality guidelines (see 40 CFR 1500), and with the APHIS' NEPA implementing regulations (see 7 CFR 372).

The EA addresses the need to manage damage and threats of damage associated with several bird species listed in section 2.1.1 of the EA. WS-Arizona may also receive requests for BDM assistance associated with several other bird species, but requests associated with those species would occur infrequently and/or would involve a small number of individual birds of a species. BDM associated with those species would occur primarily at airports where individuals of those species become a hazard to aircraft.

The need for action identified in Section 1.3 of the new EA arises from requests for BDM assistance. The EA evaluates the need for action for BDM, the potential issues associated with managing bird damage, and the environmental consequences of conducting different alternatives to meet the need for action while addressing the identified issues. WS-Arizona defined the issues associated with meeting the need for action and identified preliminary alternatives through consultation with the US Fish and Wildlife Service (USFWS) and Arizona Game and Fish Department (AZGFD). The EA analyzes four alternatives to meet the need for action based on the issues identified in section 2.1 of the EA.

A discussion of WS' authority and the authority of other agencies, as those authorities relate to BDM, occurs in Section 1.7 of the EA. Section 1.7 also includes several laws and statutes that authorize, regulate, or otherwise affect WS' activities. WS-Arizona will comply with all applicable federal, state, and local laws and regulations in accordance with WS Directive 2.210.

AFFECTED ENVIRONMENT

Bird damage or threats of damage could occur statewide in Arizona wherever those species occur. Those bird species addressed in the EA are capable of utilizing a variety of habitats in the state. Some of the species of birds addressed in the EA occur throughout the year across the state where suitable habitat exists for foraging, nesting, and shelter. Some of the species are gregarious (*e.g.*, form large flocks) during the migration periods or during the nesting periods, which can increase damage and threats of damage during certain times of the year.

ISSUES

Issues are concerns regarding potential effects that might occur from a proposed activity. Federal agencies must consider such issues during the NEPA decision-making process. Section 2.1 of the EA describes the issues considered and evaluated in detail by WS-Arizona as part of the decision-making process. In addition to those issues analyzed in detail, we identified several issues during the development of the EA but did not consider those issues in detail. Section 2.2 of the EA discusses the rationale for the decision not to analyze those issues in detail.

COOPERATING AGENCYS, TRIBES, AND PUBLIC INVOLVEMENT

WS-Arizona provided a draft for review to agencies and tribes in Arizona in August 2022. WS-Arizona also made the EA available to the public for review and comment through notices published in local media and through direct notification of interested parties. WS-Arizona made the EA available to the public for review and comment by a legal notice published in the *Arizona Republic Newspaper* on January 24, 2022, on the APHIS website on January 12, 2022, and on the federal e-rulemaking portal at the regulations.gov website beginning on January 12, 2022. The opportunity for public comment closed on February 28, 2022.

During the public comment period, WS-Arizona received 13,738 comment submissions on regulations.gov. We provided responses to substantive comments in section 5.4 of the final EA. Comments that are individual opinions or comments that oppose or support an agency action without any substantive information included in the comment do not warrant an agency response.

ALTERNATIVES

The EA evaluated four alternatives in detail to respond to the need for action discussed in Chapter 1 and the issues identified in Chapter 2 of the EA. Section 3.2 of the EA provides a description of the alternatives evaluated in detail.

- Alternative 1: Continue the Current WS-Arizona BDM Program
- Alternative 2: WS-Arizona Provides Nonlethal BDM Only
- Alternative 3: WS-Arizona Provides Technical Assistance Only for BDM
- Alternative 4: No Federal WS-Arizona BDM

A detailed discussion of the effects of the alternatives on the issues occurs in Chapter 4 of the EA. WS-Arizona considered additional alternatives but did not evaluate those alternatives in detail with the rationale provided in Section 3.3 of the EA. WS-Arizona will abide by all of the SOPs discussed in Section 3.5 if the decision-maker selects the proposed action alternative (Alternative 1). If the decision maker selects the nonlethal BDM only alternative (Alternative 2) or the technical assistance only alternative (Alternative 3), WS-Arizona's SOPs would be more restrictive. If the decision-maker selects the no involvement by WS-Arizona alternative (Alternative 4), the lack of assistance by WS-Arizona would preclude the employment or recommendation of those SOPs.

ENVIRONMENTAL CONSEQUENCES

Section 4.1 of the EA analyzes the environmental consequences of each alternative to determine the extent of actual or potential impacts on the issues. Section 4.1 of the EA provides information needed to make informed decisions when selecting the appropriate alternative to address the need for action. The proposed

action/no action alternative (Alternative 1) served as the baseline for the analysis and the comparison of expected impacts among the alternatives.

The following resource values in Arizona 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 designated for threatened or endangered species), 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. The discussion below provides a summary of the environmental consequences of the alternatives discussed in the EA for each of the issues analyzed in detail.

Issue 1 - Effects of BDM on Target Bird Species Populations

WS monitors target bird take in BDM to determine if take has remained within the range analyzed by the EA. Thus far, WS has not exceeded a significant level of take for any bird species which was analyzed in the prior EA (WS 1996). However, all bird species taken in BDM are being considered in this EA and bird populations and abundance can change, and, therefore, their populations along with applicable sport harvest, considering cumulative impacts, would be considered and monitored annually. WS SOPs, discussed in Section 3.5, ensure that the take of birds remains below a sustainable harvest, unless the managing agency has different management goals.

A common concern among members of the public, wildlife management agencies, tribes, and WS is whether BDM actions adversely affect the viability of target native species populations. The target species selected for analysis in this EA are the primary ones which may be affected by WS's BDM activities, especially those species that more than just a few individuals would likely be killed by WS' use of lethal control measures under the proposed action in any one year.

Maintaining viable populations of all native species is a concern of the public and of biologists within the State and Federal land and wildlife management agencies, including WS. Additionally, some birds addressed in this EA are taken by other entities and private parties for depredation and harvested by hunters. Where data is available, other take will be used with WS take to determine cumulative impacts.

To fully understand the need for BDM, it is important to have knowledge about the species that cause damage and the likelihood of damage. Full accounts of life histories for these species can be found in bird reference books. Species are primarily given in order of WS-Arizona BDM efforts directed towards them, their subsequent take, and the occurrence and value of damage that the species cause in Arizona. However, less damaging species may be combined with species that cause more damage where life history and damage are somewhat similar. It should be noted that jurisdiction and management of these species mostly lies with USFWS and AZGFD which was discussed in Section 1.7.1.2 and 1.7.1.3.

The lack of WS-Arizona direct involvement does not preclude the lethal removal of birds by those persons experiencing damage or seeking assistance from other entities. If WS-Arizona only provided nonlethal assistance under Alternative 2 or provided only technical assistance under Alternative 3, those people experiencing damage or threats could remove birds themselves or seek assistance with removal from other entities under any of the alternatives when the USFWS and/or AZGFD authorizes the take. In some cases, a landowner or their designee can lethally remove individual birds of certain species at any time they cause damage without the need to have specific authorization from the USFWS (*e.g.*, depredation orders, control orders, unprotected species). Under Alternative 4, a resource owner could seek assistance from private

businesses to remove birds causing damage or they could remove certain bird species (e.g., waterfowl) during the regulated hunting seasons in the state. Therefore, WS-Arizona's involvement in the lethal removal of those birds under Alternative 1 would not be additive to the number of birds that could be removed by other entities in the absence of WS' involvement.

The number of birds lethally removed annually would likely be similar across the alternatives because the removal of birds could occur even if WS-Arizona was not directly involved with BDM assistance (Alternative 4) or only provided technical assistance (Alternative 3). WS does not have the authority to regulate the number of birds lethally removed annually by other entities.

Issue 2 - Effects of BDM on Nontarget Species Populations, Including T&E Species

Special efforts are made to avoid taking nontarget species during BDM or jeopardizing T&E species. The selectivity of BDM methods has been improving through the years, and much credit goes to WS' National Wildlife Research Center (NWRC). Improved cage traps, hazing techniques, and other BDM tools and the development of new methods such as lasers have helped WS Specialists be more efficient and effective at focusing efforts on target species while minimizing take of nontarget species. T&E species are avoided by conducting biological evaluations of the potential effects and the establishment of special restrictions or measures to reduce the potential for take, and consultation with USFWS and AZGFD biologists. WS SOPs include measures intended to reduce the effects of BDM on nontarget species populations, especially T&E species, and are presented in Section 3.5.

A common concern among members of the public and wildlife professionals, including WS personnel, is the potential impacts of BDM methods and activities on nontarget species, particularly T&E species. From FY16 to FY20, WS-Arizona trapped and released 3 nontarget birds (2 Common Gallinules and 1 Abert's Towhee) during BDM activities. Nontarget take was minor when compared to target take. Some nontarget species may benefit from BDM. Prime examples are the benefit to native cavity nesting bird species that benefit from any reduction in European starling populations due to competition for nesting locations. Other bird species, including some T&E species, could benefit from reductions in populations of Brown-headed Cowbirds which parasitize nests of other birds.

The ability of people to effectively conduct BDM would be variable under Alternative 2, 3 and 4 because the skills and abilities of the person implementing BDM actions would determine the level of success in resolving BDM issues. If private citizens or other entities apply those BDM methods available as intended, risks to nontarget animals would be similar or potentially greater than Alternative 1. If private citizens or other entities apply methods available incorrectly or apply those methods without the proper knowledge of animal behavior, risks to nontarget animals would be higher under any of the alternatives. If frustration from the lack of all available assistance under Alternative 2, 3 and 4 caused those people experiencing bird damage to use methods that were not legally available for use, risks to nontarget animals would be higher under those alternatives.

Based on a review of the threatened and endangered species listed in the state during the development of the EA, WS determined that activities conducted pursuant to Alternative 1 would not likely adversely affect those species listed in the state by the USFWS nor their critical habitats. As part of the development of the EA, WS consulted with the USFWS pursuant to Section 7 of the Endangered Species Act (ESA). The USFWS concurred with WS' determination that activities conducted pursuant to Alternative 1 would not likely adversely affect those species currently listed in the state or their critical habitats (USFWS 2018). WS-Arizona would continue to consult with the USFWS to evaluate activities to resolve BDM issues to ensure the protection of threatened or endangered species and to comply with the ESA .

Issue 3 - Effects of BDM on Public and Pet Health and Safety and the Environment

The threats to human and pet safety from BDM would be similar across the alternatives because many of the same methods would be available to the public or private entities. If WS implemented Alternative 2 or Alternative 3, the only method that would not be available for public use under either of those alternatives would be DRC-1339.

WS Specialists have SOPs to reduce potential safety impacts from BDM to the public, pets, and the environment. WS relies on its Specialists to use their professional judgment to determine the most effective BDM methods. WS Specialists are professionally trained to use BDM techniques, especially those that could have the potential to impact themselves, the public, and the environment. Several BDM methods have the potential to be hazardous including firearms, pyrotechnics, and avicides. Measures to reduce potential problems are given in Chapter 3

If people used methods incorrectly or without regard for safety, risks to human and pet safety would increase under any of the alternatives. The expertise of WS' employees in using the BDM methods would likely reduce threats to safety because WS' employees receive training and would be knowledgeable in the use of methods. In addition, WS personnel would use the WS Decision Model when assessing a request for assistance (see WS Directive 2.201). As part of the WS Decision Model, WS' personnel consider risks to human health and safety when evaluating the methods available for BDM assistance. WS' personnel must also adhere to all WS' directives when conducting BDM. No adverse effects to human and pet health and safety occurred from the use of BDM methods by WS-Arizona between FY16 and FY20.

Issue 4 - Effects of BDM on the Aesthetics

Birds may provide aesthetic enjoyment to people, such as through observations, photographing, and knowing they exist as part of the natural environment. Methods available that WS-Arizona or other entities could employ under each of the alternatives could result in the dispersal, exclusion, or removal of individuals or small groups of birds to resolve BDM issues. Therefore, the use of methods often results in take of birds from the area where damage was occurring and dispersal or exclusion of birds from an area. Because BDM methods would be similar across the alternatives, the use of those methods would have similar potential impacts on the aesthetic value of birds. Under Alternative 1, the dispersal and/or lethal removal of birds would not reach a magnitude that would prevent the ability to view those species outside of the area where damage was occurring. The effects on the aesthetic values of birds would therefore be similar across the alternatives and would be minimal.

Issue 5 – Humaneness of BDM

The impacts of BDM activities on humaneness and animal welfare concerns is subjective to the observer and that observer's knowledge and experience with the methods used. Under Alternatives 2, 3, and 4, negative impacts on humaneness and animal welfare would still occur in the private sector, due to a lack of oversight and governmental enforcement. These negative impacts under Alternatives 2, 3, and 4 would likely be greater than under the proposed action Alternative 1, because WS-Arizona adheres to American Veterinarian Medical Association (AVMA) euthanasia standards. Other non-WS entities or private individuals are rarely subject to enforced reporting of the method of take or number of birds taken under depredation permits or by other private activities.

The issue of humaneness related to BDM methods is fully discussed for each alternative in Chapter 4. SOPs to alleviate pain and suffering are discussed in Chapter 3.5 of the EA.

CUMULATIVE IMPACTS OF ALTERNATIVE 1:

No significant cumulative environmental impacts are expected from any of the four alternatives, including the proposed action/no action alternative (Alternative 1). Under Alternative 1, the lethal take of target bird species by WS-Arizona to alleviate damage or threats of damage would be of a low magnitude at the levels addressed in the EA when compared to the total known take of those species and the populations of those species (see Section 4.1 and Appendix A).

The USFWS and/or AZGFD could adjust take levels, including the take by WS, to achieve population objectives for bird species. The unintentional take of nontarget animals would likely be limited and would not reach a magnitude where adverse effects would occur to a species' population. From FY16 through FY20, WS-Arizona trapped and released 3 nontarget birds while conducting BDM activities. No nontarget species were lethally removed by WS-Arizona's BDM activities during the analysis period. Based on the methods available to resolve BDM issues and the analysis in the EA, WS-Arizona does not anticipate the number of nontarget animals lethally removed to reach a magnitude where declines in those species' populations would occur.

WS-Arizona received no reports or documented any effects to human safety from BDM activities conducted from FY16 through FY20 nor anticipates any to occur. Because those people seeking assistance from WS could take birds from areas where damage was occurring themselves in the absence of any involvement by WS, WS-Arizona's involvement would have no effect on the aesthetic value of birds in the area where damage was occurring if those people would have removed those birds themselves. Therefore, WS does not expect to have any cumulative adverse effects on the aesthetic value of birds if the dispersal or removal occurs at the request of a property owner and/or manager. WS-Arizona will employ methods as humanely as possible by applying operating policies and using approved methods. The analysis in the EA indicates that the proposed action (Alternative 1) which is an integrated approach to BDM would not result in significant cumulative adverse effects on the quality of the human environment.

CUMULATIVE IMPACTS OF ALTERNATIVE 2:

Under alternative 2, WS-Arizona would not take any target or nontarget species because lethal BDM methods would not be used. Alternative 2 is similar to Alternative 1 (No Action), except that WS-Arizona would not be available to provide any lethal operational BDM assistance to any requester, even if requested as an agent of AZGFD or the USFWS. Requesters may conduct lethal BDM activities on their own, but would be dependent on commercial companies, AZGFD, USFWS, or volunteers/family/friends when they require assistance with lethal BDM activities.

WS-Arizona could recommend several non-lethal management strategies (EA Section 3.4) to the requester for short-term and long-term solutions to managing damage, as well as recommend and provide training on lethal techniques. Those persons receiving technical assistance from WS-Arizona could implement recommended methods, use other lethal and non-lethal methods not recommended by WS-Arizona, seek assistance from other entities, or take no further action. While WS-Arizona could recommend non-lethal and lethal methods, WS-Arizona would only loan equipment or implement those non-lethal methods legally available for use by the requester and advise them of any permits needed.

Exclusionary devices can be effective in preventing access to resources in certain circumstances. The primary exclusionary methods are netting and overhead lines. Exclusion is most effective when applied to small areas to protect high value resources. However, exclusionary methods are neither feasible nor effective for protecting human safety, agricultural resources, or native wildlife species from birds across large areas. These methods often have negative aesthetic impacts to natural areas or building structures. Limiting the availability of methods under this alternative to only non-lethal methods could be inappropriate when attempting to address threats to human safety expeditiously, primarily at airports.

The restrictions on WS-Arizona's ability to use any strategy or combination of methods to alleviate BDM conflicts under Alternatives 2 could result in less effective and less environmentally responsible resolution of BDM issues.

CUMULATIVE IMPACTS OF ALTERNATIVE 3:

Under this alternative, WS-Arizona would have no impact on any bird species population in Arizona because WZ-Arizona would not conduct any operational BDM activities. WS-Arizona would offer advice on the BDM techniques that to resolve different damage problems. This alternative would place the immediate burden of using methods to alleviate damage on the resource owner, other governmental agencies, and/or private businesses. Those entities could take action using those methods legally available to alleviate or prevent bird damage as permitted by federal, state, and local laws and regulations or those persons could take no action.

Since most of WS-Arizona BDM occurs at airports, it would not make sense to consider technical assistance only when addressing human health and safety threats on airports. The potential for use of illegal chemicals and other non-permitted methods by frustrated individuals under this alternative could lead to real but unknown impacts on target bird populations. Impacts and hypothetical risks under alternative 3 would probably be more than under Alternative 2 and less than under Alternative 4.

CUMULATIVE IMPACTS OF ALTERNATIVE 4:

This alternative would preclude any BDM by WS-Arizona to reduce threats to human health and safety, and alleviate damage to agricultural resources, property, and natural resources. WS-Arizona would not conduct BDM in the state, so no direct cumulative impacts would occur by WS-Arizona. However, other private entities would likely conduct similar BDM activities, which means the impacts would then be similar to the current program alternative or even potentially increased negative impacts from BDM activities conducted by individuals or entities with less experience conducting BDM. Also, private citizens or companies are not obligated to conduct any NEPA analyses, engage in consultations under the ESA, or conduct formal monitoring and reporting of take or other impacts. This could result in increased unknown or negative impacts compared to BDM conducted under Alternative 1 because WS-Arizona is required to report and monitor all BDM activities.

MONITORING

Under Alternative 1, WS-Arizona will monitor BDM activities annually to determine whether the analyses and determinations in the EA adequately address current and anticipated future activities, and to determine whether new information warrants supplementing or replacing the EA. Under Alternative 1, WS-Arizona will provide take data to all applicable natural resource management agencies. The data will help monitor the impacts on wildlife populations.

NEW INFORMATION

We are not aware of any significant new information that has become available since the EA was made available to the public. Studies and publications provided to us have been reviewed, and relevant publications were incorporated into the final EA, where applicable. Sources provided and incorporated into the Final EA are listed in Chapter 5.3 of the EA.

CLARIFICATIONS AND ADDITIONS TO THE PRE-DECISIONAL DRAFT EA

WS-Arizona has made general edits to the Pre-Decisional Draft EA and some clarifications in response to public comments and review of available information. These clarifications are consistent with the analyses, conclusions, and material presented in the Pre-Decisional Draft EA and more fully describe potential effects of WS-Arizona's BDM activities under the alternatives. Key clarifications and additions are:

- Added section 2.2.10: "Wildlife Damage Management Should Be Fee Based and Not a Taxpayer Expense" to the issues not considered in further detail section in response to public comments received.
- Added Chapter 5.4: Responses to Public Comments
- General formatting and grammatical edits.

DECISION AND RATIONALE

Section 1.6 of the EA identifies several decisions based on the scope of the EA. Based on the analysis included in this EA, I have carefully reviewed the final EA prepared to meet the need for action. I find the proposed action/no 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 final EA adequately address the identified issues, which reasonably confirm that no significant impact, individually or cumulatively, to bird populations or the quality of the human environment are likely to occur from Alternative 1, nor does Alternative 1 constitute a major federal action. Therefore, the analyses in the final EA does not warrant the completion of an Environmental Impact Statement.

Based on the analyses in the final EA, selecting Alternative 1 would best address the issues identified in Chapter 2 of the final EA and applying the associated operating policies discussed in Chapter 3 of the final EA. Alternative 1 successfully addresses BDM using a combination of the most effective methods and does not adversely impact the environment, property, human health and safety, target species, and/or nontarget species, including threatened or endangered species. Alternative 1 offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers and implementation of Alternative 1 presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety. Implementing Alternative 1 would offer a balanced approach to the issues of humaneness, animal welfare, and aesthetics when considering all facets of those issues. Changes that broaden the scope of BDM activities in the state, changes that affect the natural or human environment, or changes from the issuance of new environmental regulations would trigger further analysis. Therefore, it is my decision to implement Alternative 1 as described in the final EA.

FINDING OF NO SIGNIFICANT IMPACT

Based on the analyses provided in the final EA, there are no indications that 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 Environmental Impact Statement should not be prepared. I base this determination on the following factors:

1. WS-Arizona BDM activities in the state under Alternative 1 would not be regional or national in scope.
2. Based on the analyses in the final EA, the methods available under Alternative 1 would not adversely affect human safety based on their use patterns.
3. Alternative 1 would not significantly affect unique characteristics, such as parklands, prime farmlands, wetlands, wild and scenic areas, or ecologically critical areas. SOPs discussed in Section 3.5 of the final EA and WS' adherence to applicable laws and regulations would further ensure that activities conducted under Alternative 1 would not harm the environment.
4. The effects on the quality of the human environment under Alternative 1 are not highly controversial. Although there is some opposition to managing bird damage and the methods, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the final EA and the accompanying administrative file, the effects of Alternative 1 on the human environment would not be significant. The effects associated with implementing Alternative 1 are not highly uncertain and do not involve unique or unknown risks.
6. Alternative 1 would not establish a precedent for any future action with significant effects.
7. The final EA did not identify significant cumulative effects associated with implementing Alternative 1. The final 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 Arizona.
8. Alternative 1 would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would Alternative 1 likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. WS has consulted with the USFWS pursuant to Section 7 of the ESA and the USFWS has concurred with WS' effects determination. In addition, WS has determined that the proposed activities would not adversely affect those species currently listed by the state.
10. WS' activities conducted under Alternative 1 would comply with all applicable federal, state, and local laws.

I based this decision on several considerations. This decision takes into account social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that 1) WS would only conduct activities at the request of landowners/managers, 2) management actions would be consistent with applicable laws, regulations, policies and orders, and 3) the analysis did not identify significant effects to the human environment. By selecting the proposed action (Alternative 1), WS-Arizona will continue to provide an integrated approach to BDM to protect agriculture, property, and human health and safety in the state of Arizona.

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