

**Decision and Finding of No Significant Impact for the  
Environmental Assessment:  
Abert's Squirrel Management in Support of Mount Graham Red Squirrel  
Recovery in Arizona**

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

**November 2021**

**1. Introduction**

Wildlife in Arizona is an important part of the social fabric that comprises the human environment. Abundant wildlife populations interact with the 7.2 million citizens of the state every day. The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) responds to requests from individuals, organizations, and agencies experiencing wildlife conflicts in Arizona.

APHIS-WS in Arizona (WS-Arizona) prepared an Environmental Assessment (EA) evaluating the potential environmental impacts of alternatives for WS involvement in Abert's squirrel management activities for the Mount Graham Red Squirrel (MGRS) Recovery Project led by the United States Fish and Wildlife Service (USFWS) and the Arizona Game and Fish Department (AGFD). The proposed action is to implement an integrated approach using a variety of methods to reduce the number of Abert's squirrels within MGRS critical habitat located in the coniferous forest areas of the Pinaleno Mountains in southeastern Arizona.

This Decision document provides notification of WS-Arizona's choice of an alternative and determination regarding the environmental impacts of the chosen alternative.

**2. Purpose and Need**

This environmental assessment (EA) evaluates the impacts of three alternatives for the proposed Abert's Squirrel Removal Project located in the Pinaleno Mountains, Graham County, Arizona. The purpose of the EA is to assist APHIS-WS in understanding the options and the associated comparative impacts of each of the Alternatives.

WS-Arizona is conducting the Abert's Squirrel Removal Project at the request of AGFD and USFWS in collaboration with a team of Mount Graham red squirrel experts and managers to reduce the number of Abert's squirrels in historical MGRS habitat throughout the Pinaleno Mountains to assist in meeting the needs of the MGRS draft recovery plan (USFWS 2011).

### **3. Public Involvement**

On August 16, 2021, WS-Arizona solicited public comment on alternatives and issues addressed in the Pre-decisional Draft of the 2021 EA. WS-Arizona did not receive any public comments on the pre-decisional draft. We will make this Decision and Finding of No Significant Impact (FONSI), and the Final EA, available to the public using the same methods for the Pre-decisional EA.

### **4. Affected Environment**

WS-Arizona activities will occur in timber and forested areas; wildernesses and wilderness study areas where authorized, and other places within the Pinaleño Mountains in Graham County, Arizona, where Abert's squirrels may exist and create conflicts with MGRS.

Recovery of the Mount Graham red squirrel will likely be long and challenging. Its limited habitat, isolation to one mountain range, and demographic characteristics restrict its ability to rebound quickly from threats that impact both the squirrel and its habitat. Currently, threats to the red squirrel include habitat degradation and loss through high-severity wildfire, fire suppression activities, insect outbreaks, climate change, and human development, as well as competition with Abert's squirrels and predation (USFWS 2011). A critical first step is to protect and manage the remaining population of the MGRS and its habitat. Management will include, but is not limited to, maintaining and improving the spruce-fir and mixed conifer biomes while balancing the need to reduce risk of catastrophic wildfire with the needs of the squirrel (USFWS 2011). All of which will improve the aesthetic enjoyment on public lands within the MGRS recovery area. WS-Arizona does not expect to significantly impact recreational activities in the MGRS recovery area include hunting, fishing, wildlife viewing, sightseeing, horseback riding, camping, and hiking among others.

### **5. Issues**

We identified the following issues during the development of the EA and used them to drive the environmental analysis and compare the potential impacts of the alternatives.

1. Effects on Target Species: What might be the direct, indirect, and cumulative impacts of removing Abert's tree squirrels within the Pinaleño Mountains in Graham County to reduce competition and increase survival rates of the MGRS.
2. Effects on Nontarget Species: What might be the direct, indirect, and cumulative impacts on non-target species, including T&E species and their ecosystems?
3. Effects on Public Safety, pets, and the Environment: What are the potential risks to public safety, pets, and the environment from implementing the proposed action?

We considered 6 additional issues in the EA, but we did not analyze them in detail, as explained in Section 2.4 of the EA.

### **6. Alternatives Analyzed in Detail**

Chapter 3 of the Final EA considered and analyzed 3 alternatives to address the 5 primary issues identified. The following is a summary of the alternatives considered in detail in the EA. Section 2.6 of the EA summarizes each alternative and Chapter 3 provides analysis and comparison of the potential effects of each alternative.

### **Alternative 1: WS-Arizona’s Proposed Action**

The proposed action is for WS-Arizona to continue assisting AGFD and the USFWS with the Abert’s Squirrel Removal Project to reduce the number of Abert’s squirrels in historical MGRS habitat throughout the Pinaleno Mountains. The primary goal of the project is to decrease resource competition with MGRS, which were reduced to extremely low numbers (approximately 33 individuals) as reported by the Arizona Game and Fish Department (AGFD 2020) after the 2017 Frye Fire. Three years after their habitat was nearly wiped out by the 2017 Frye Fire in the Pinaleno Mountains of southeastern Arizona, an annual survey of the endangered Mount Graham red squirrel shows an exciting and notable increase in their population. The annual survey conducted jointly by the Arizona Game and Fish Department (AZGFD), Coronado National Forest, U.S. Fish and Wildlife Service (USFWS), Arizona Center for Nature Conservation – Phoenix Zoo, and the University of Arizona, resulted in a minimum estimate of 109 squirrels. This is the first time the population has returned to the triple digits since they were severely impacted by the Frye Fire (AGFD 2020).

Proposed activities include lethal removal of Abert’s squirrels with firearms or live-trapping and euthanasia. WS personnel are to be trained to identify differences between Abert’s and MGRS and are properly trained and certified for using firearms and cage traps. All activities will be conducted in accordance with applicable federal, state, and local laws and WS Directives.

### **Alternative 2: WS-Arizona Provides Technical Assistance Only**

Under this alternative, WS-Arizona would only provide technical assistance and make recommendations when requested with techniques, such as cage traps, and shooting. This alternative would not allow WS-Arizona to conduct operational direct control activities. State agency personnel, or others could conduct activities including the use of cage traps and shooting, and any other legal lethal or nonlethal methods.

### **Alternative 3: No Involvement from WS-Arizona**

This alternative would eliminate involvement by WS-Arizona. Neither operational management nor technical assistance with the methods described under Alternative 1 would be provided by WS-Arizona. Under this Alternative, WDM would be handled by AGFD, USFWS, private contractors, licensed hunters, non-federal government agencies or other federal government agencies.

## **7. Monitoring**

Under Alternative 1, WS-Arizona will monitor program activities annually to determine whether the analyses and determinations in the EA adequately address current and anticipated future activities, and whether there is new information that warrants supplementing or replacing the EA.

## **8. New Information**

We are not aware of any significant new information that has become available since the EA was made available to the public. WS-Arizona developed this EA under the 1978 NEPA regulations and existing APHIS procedures since this EA was initiated prior to the September 14, 2020 NEPA revisions.

## **9. Use of the Best Available Science**

WS-Arizona used the best available data and information from wildlife agencies having jurisdiction by law (AGFD and USFWS; 40 CFR § 1508.15), as well as scientific literature, especially peer-reviewed scientific literature, to inform its decision-making. The EA uses the best available information from those sources to provide estimates of wildlife population size and status, assess risks to human safety, sociocultural resources, and potential ecological impacts.

## **10. Review of Alternatives**

The EA conducted a detailed analysis of the alternatives based on the issues identified in Section 2.2. Chapter 3 of the EA details the environmental effects from the alternatives and issues identified in Chapter 2. Our analysis showed that none of the alternatives would have a significant impact on the human environment. After reviewing the EA and carefully evaluating all alternatives, WS-Arizona has determined that Alternative 1 offers the greatest opportunity to meet our purpose and need for action within current regulatory constraints. Alternative 1 enables development of effective site-specific strategies that accommodate resource manager objectives and minimize the risk of adverse impacts on the human environment.

The restrictions on WS-Arizona's ability to use any strategy or combination of methods to reduce Abert's squirrel numbers under Alternatives 2 and 3 could result in less effective and less environmentally responsible resolution as described throughout Chapter 3 of the EA. Alternative 2 and 3 of the EA discussed and compared how other entities may meet the need for action if WS-Arizona is limited or absent.

### **Effects on Target Species Populations (EA 3.2.1)**

Under the Preferred Alternative (Alternative 1), take by WS-Arizona and others will be considered statewide providing a more comprehensive analysis of impacts to Abert's tree squirrels. There currently is no requirement to report take for Abert's squirrels in the Pinaleno Mountains by licensed hunters. The goal of AGFD is elimination of Abert's squirrels within the Pinaleno Mountains because AGFD considers them an invasive species in this area because they are not native to the Pinaleno Mountains. The EA indicates that the implementation of the preferred Alternative would not result in significant impacts to the statewide population of Abert's tree squirrels in Arizona. The annual statewide known cumulative take for Abert's tree squirrels is below the annual maximum sustainable harvest level.

We anticipate that cumulative take by WS-Arizona and non-WS entities will be similar across all alternatives. Under Alternative 2 and 3, where WS-Arizona cannot provide lethal assistance, we anticipate that cumulative lethal take would be similar to Alternative 1 because AGFD, USFWS, or other entities are capable of implementing. The restrictions of WS-Arizona's actions under Alternative 2 and 3 may lead to increased negative impacts to the environment because other entities may not have the same level of training and skill to effectively and responsibly meet the project goals.

### **Effects on Nontarget Species Populations, Including T&E Species (EA Section 3.2.2)**

We have concluded that none of the three alternatives have a significant impact on non-target species.

Under alternatives where WS-Arizona does not provide the full range of assistance (Alternatives 2 and 3), non-WS entities may conduct MDM and do not have the same skill levels, equipment, experience, or obligations under NEPA. Under these alternatives, there is likely to be slightly greater or unreported

impacts to non-target species. WS-Arizona activities have a high level of selectivity in the application of the proposed strategies and methods.

No non-target species have been taken by WS-Arizona personnel since the beginning of the project. Any potential unintentional capture and take of nontarget species while conducting activities by WS-Arizona is not expected to have a negative effect on nontarget species' populations in Arizona.

We have concluded that none of the three alternatives will have a significant impact on T&E species. WS-Arizona completed ESA consultations in 2018 under Section 7 with USFWS for activities in the EA, ensuring there will not be significant effects to those species. These consultations and the protective measures associated with them apply to WS-Arizona's activities under Alternatives 1 and 2. Non-federal entities are not required to conduct ESA consultations on their actions, nor are they bound by these protective measures, and their activities may have a greater impact on state-listed threatened or endangered species or ESA-listed species. Therefore, Alternative 3 presents a greater risk to both state-listed and ESA-listed threatened and endangered species than Alternative 1 and 2.

WS-Arizona works with federal and state resource managers, communicating the risks of conducting activities and evaluating effects on nontarget and T&E species to further ensure that cumulative take of any species would not have negative effects on the population. For these reasons, there is not expected to be any adverse cumulative effects on nontarget species populations resulting from the proposed action.

### **Effects on Public Safety, Pets, and the Environment (EA 3.2.3)**

We have determined that none of the alternatives have a significant impact on the environment (soil, water, and terrestrial and aquatic species) or human and pet safety. Alternatives that limit WS-Arizona's involvement in MDM (Alternatives 2 and 3) may result in increased impacts by less skilled non-WS entities, which could result in increased adverse effects compared to Alternative 1, the Proposed Alternative.

Risks to human health and safety from WS-Arizona's actions were determined to be low under all the alternatives. WS formal Risk Assessments for the proposed methods support this determination. WS-Arizona adheres to a variety of operating policies, which further reduces risks to humans and the environment from these methods, as described in EA Section 2.4 and 2.5.

## **11. Accomplishment of Goals and Objectives**

By evaluating the ability of the alternatives to meet the overall goals and objectives, we were able to compare the results to the environmental consequences of the alternatives on the human environment to help make an informed decision that would best meet the competing needs for this project. WS-Arizona also developed objectives for implementing the proposed action to protect various resources and evaluate impacts on the human environment. The EA incorporates these objectives (Section 1.1.5) throughout the document.

Only Alternative 1, the Proposed Action, met all objectives for WS-Arizona's proposed action.

Alternative 2 only allows WS-Arizona to provide technical assistance and which would restrict our available methods and ability to meet our goals and objectives.

Alternative 3 would eliminate WS involvement this MGRS recovery project. WS would not provide direct operational or technical assistance and requestors of WS services would have to conduct their

own activities without WS input. This alternative would not restrict other agencies or private individuals/hunters from using lethal or non-lethal methods, but it fails to meet the goals and objectives stated in Section 1.4.

## **12. 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 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 Environmental Impact Statement.

Based on the analyses in the EA, the issues identified are best addressed by selecting Alternative 1 (Proposed Action) and applying the associated operating policies discussed in Chapter 2 of the EA. Alternative 1 would successfully meet the need for action using a combination of the most effective methods and would not adversely affect the environment, property, human safety, and/or non-target species, including threatened or endangered species. Alternative 1 would offer the greatest chance of maximizing effectiveness while minimizing cumulative effects on the quality of the human environment. In addition, Alternative 1 would present the greatest chance of maximizing net benefits while minimizing adverse effects to public health and safety. Further analysis would be triggered if changes occur that broaden the scope of proposed activities that affect the natural or human environment, or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action alternative (Alternative 1) as described in the EA.

## **13. Finding of No Significant Impact**

The analysis in the EA indicates that Alternative 1, the Proposed Action, does not constitute a major federal action significantly affecting, individually or cumulatively, the quality of the human environment. I agree with this conclusion and, therefore, determine that an Environmental Impact Statement (EIS) will not be prepared. This determination is based on consideration of the following factors:

- A. The proposed activities will occur on a limited area; the Pinaleño Mountains in southeastern Arizona.
- B. The proposed activities will not significantly affect public health and safety. The methods used are target specific and not likely to affect public safety.
- C. The proposed activities will not have an impact on unique characteristics of the geographic area such as historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- D. The effects on the quality of the human environment of the proposed activities are not highly controversial. Although some people may oppose lethal methods, the methods and impacts are not controversial among experts, are not highly uncertain and do not involve unique or unknown risks because methods and techniques have been successfully deployed.

- E. The proposed activities do not establish a precedent for actions with future significant effects or represent a decision in principle about a future consideration and activities will not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment
- F. There are no significant cumulative effects identified by this assessment. All activities will be coordinated with AGFD, USFWS, and other land management authorities (EA section 1.7). There are no irreversible or irretrievable resource commitments identified by this assessment, except for a minor consumption of fossil fuels for routine operations.
- G. The proposed activities will fully comply with the Endangered Species Act of 1973, as amended. The proposed activities would either have no effect, or would not be likely to adversely affect, or not likely to jeopardize federally listed threatened and endangered species, EA section 3.2.
- H. The proposed activities will not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places nor will it cause a loss or destruction of significant scientific, cultural, or historical resources.
- I. This project works toward recovery action (Section 3.4) in the Draft Mount Graham Red Squirrel Recovery Plan, First Revision (USFWS 2011), and may have a beneficial effect to the subspecies in the long term.

**For additional information regarding this decision, please contact David Bergman, State Director, USDA-APHIS-Wildlife Services, 8836 North 23<sup>rd</sup> Avenue, Suite 2. Phoenix, AZ 85021.**

\_\_\_\_\_  
Keith Wehner  
Director, Western Region  
USDA-APHIS-Wildlife Services

November 17, 2021  
\_\_\_\_\_  
Date