

United States Department of Agriculture, Animal and Plant Health Inspection  
Service, Plant Protection and Quarantine

# Record of Decision for the Programmatic Environmental Impact Statement for the Rangeland Grasshopper and Mormon Cricket Suppression Program

October 2019

## **PURPOSE**

This document records the rationale for selecting one of the three alternatives analyzed in the final programmatic environmental impact statement (EIS), “Rangeland Grasshopper and Mormon Cricket Suppression Program”. Grasshoppers and Mormon crickets are part of rangeland ecosystems, serving as food for wildlife and playing an important role in nutrient cycling. However, grasshoppers and Mormon crickets can occur at population levels that result in damaging outbreaks. (The term “grasshopper” refers to both grasshoppers and Mormon crickets, unless differentiation is necessary.) Outbreaks produce high densities of grasshoppers and competition for the available food supply, which may cause damage to rangeland and nearby crops. Large numbers of grasshoppers can compete for food with livestock and other grazing plant-eating species. The purpose of the proposed action is to protect rangelands and nearby crops of seventeen Western States (Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming) from the adverse effects of grasshopper outbreaks.

## **STATUTORY AUTHORITIES**

The U.S. Department of Agriculture’s (USDA), Animal and Plant Health Inspection Service (APHIS) mission includes protecting and promoting U.S. agricultural health and natural resources. Specifically, the Plant Protection Act (PPA) of 2000 (7 United States Code (U.S.C.) 7701 et seq.) gives USDA-APHIS the authority to take actions to exclude, eradicate, and control plant pests, including grasshoppers and Mormon crickets. A description of USDA-APHIS statutory authorities is in section I: Purpose of and Need for Action of the final EIS.

USDA-APHIS has a Memorandum of Understanding (MOU) with each of the three Federal agencies that represent the Program’s primary federal land management partners: U.S. Department of Interior’s Bureau of Indian Affairs (BIA) and Bureau of Land Management (BLM), and USDA’s Forest Service (FS). These MOUs concern management of grasshoppers on

lands subject to the jurisdiction of each Agency, and outline the processes as to how USDA-APHIS will work with each Agency to suppress grasshoppers on the lands they manage.

According to the authority delegated under section 417 of the PPA (7 U.S.C. § 7717), USDA-APHIS may be requested to work in conjunction with a Federal land management agency or a State agriculture department (on behalf of a State, local government, tribe, private group, or individual) to treat areas that are infested with grasshoppers when they reach a level of economic infestation.

USDA-APHIS does not have the authority to conduct suppression programs for grasshoppers on private croplands. However, if small amounts of croplands (typically less than 15 percent of the treatment area) are interspersed in a rangeland treatment block, USDA-APHIS could treat the entire block in order to maintain the continuity of the treatment area.

## CONSIDERATION OF ALTERNATIVES

USDA-APHIS considered the following alternatives in the final programmatic EIS for this record of decision:

**Alternative 1 – No Action:** USDA-APHIS would maintain the Program as described in the 2002 EIS and record of decision. The insecticides used in the Program include carbaryl, diflubenzuron, and malathion applied with ground or aerial equipment at APHIS full coverage rates or by using Reduced Agent Area Treatments (RAATs).

**Alternative 2 – No Suppression Program:** USDA-APHIS would not fund or participate in any program to suppress grasshopper outbreaks. USDA-APHIS may opt to provide technical assistance. Other Federal agencies, State agriculture departments, local governments, or private groups or individuals would be responsible for implementing grasshopper control measures.

**Alternative 3 – Adaptive Management:** The adaptive management approach includes all of the suppression activities under Alternative 1 and includes the use of the insecticide chlorantraniliprole. USDA-APHIS would apply one insecticide to a treatment area at the USDA-APHIS rate (which is less than the labeled conventional rate), or RAATs for grasshopper suppression treatments. Under this alternative, the RAATs strategy uses a reduced rate of insecticide from the conventional rate or USDA-APHIS rate by alternating treatment swaths in a spray block, reducing application rates, or both. Adaptive management enables the Program to add other treatment(s) that may become available in the future for managing grasshoppers if it poses no greater risks to human health and nontarget organisms than the risks associated with approved treatments.

In addition to the proposed alternatives, USDA-APHIS conducts survey activities and provides technical assistance. Surveys are part of each alternative proposed, and are not unique to any one alternative. USDA-APHIS has also prepared the Grasshopper Integrated Pest Management (IPM) User Handbook to provide managers of public and private lands with information on biological control, chemical control, environmental monitoring and evaluating, modeling and

population dynamics, rangeland management, decision support tools, and future directions. USDA-APHIS promotes the use of IPM.

## **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The adaptive management (alternative 3) alternative is the environmentally preferred alternative and provides the greatest flexibility to manage grasshopper outbreaks. Alternative 1 also provides flexibility but does not include the use of the insecticide chlorantraniliprole and adaptive management. Both alternatives 1 and 3 have unfavorable effects due to insecticide applications but USDA-APHIS believes these effects in the long-term would be less than what would occur under the no suppression alternative (alternative 2).

## **THE DECISION**

USDA-APHIS chose the adaptive management (alternative 3) approach for addressing grasshopper outbreaks in the 17 Western states. This approach involves the application of insecticides at USDA-APHIS conventional rates or RAATs to suppress grasshopper outbreaks. It also includes adaptive management, which is the addition of other treatment(s) that become available to the currently approved treatments for managing grasshoppers. USDA-APHIS would only add a new chemical treatment if the U.S. Environmental Protection Agency (USEPA) approves its use on grasshoppers and it poses no greater risks to human health and non-target species than are disclosed in the final programmatic EIS for the currently approved chemical treatments.

USDA-APHIS will not implement site-specific suppression projects as a direct result of the decision that will follow this programmatic EIS. Rather, USDA-APHIS will prepare state- or site-specific environmental assessments to address local issues before implementing this alternative. USDA-APHIS will tier site-specific environmental analyses to the final programmatic EIS.

## **RATIONALE FOR THE DECISION**

USDA-APHIS compared the alternatives based on (1) how they respond to the goal of suppressing grasshopper outbreaks, (2) how they respond to issues that arose during scoping, and (3) the flexibility they provide in suppressing grasshopper outbreaks.

USDA-APHIS chose the adaptive management approach (alternative 3) because it is a suppression program that provides several treatment options that afford flexibility and site-specific adaptations in managing grasshoppers in affected areas. Several of the treatment options under this approach have been successful in reducing grasshopper populations in the United States.

The adaptive management approach (alternative 3) best meets the goal to suppress grasshopper outbreaks by allowing the agency to apply insecticides, primarily using RAATs, in areas where outbreaks occur. The no suppression alternative (alternative 2) does not meet USDA-APHIS goal to suppress grasshopper outbreaks. Alternative 1 does meet the Agency's goal to suppress grasshopper outbreaks, but does not include the insecticide chlorantraniliprole, an effective tool in grasshopper management, and adaptive management.

Grasshopper suppression would best occur under alternative 3 where the program has four insecticides to choose from based on site conditions. Upon receiving a request to treat for grasshoppers, the Program must determine if the grasshopper population has reached levels of economic infestation and meets the other criteria warranting treatment. This includes consideration of the pest population, pest life stage, pest and plant species affected, condition of the rangeland, cost share with State and private landowners, and the cost benefit of making a treatment. If factors indicate low damage or very high treatment costs without much potential for benefits, then treatments would not occur. The Program selects insecticides that best match the grasshopper species and life stage as well as site conditions.

Allowing the Program to apply insecticide treatments to suppress grasshopper outbreaks would contain the outbreak and facilitate rangeland management.

## **MITIGATING MEASURES**

USDA-APHIS recognizes the alternatives may pose some risk to human health and the environment, in particular insecticide use. USDA-APHIS mitigates risks associated with the insecticide treatments by imposing Program requirements and following Federal regulations regarding the use of insecticides. Federal regulations includes adherence to the pesticide label, and other Program-specific measures that are more restrictive than the label for each pesticide. The coordination with State and other stakeholders on site-specific suppression efforts ensure the implementation of State and local requirements. Site-specific analyses will determine the need for further mitigation measures. These measures are designed to reduce environmental impacts and the potential for cumulative impacts from Program applications.

USDA-APHIS considered the potential effects of a grasshopper outbreak and the grasshopper suppression program on federally listed species and designated critical habitat. USDA-APHIS has completed a programmatic consultation with the Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) for the Program (concurrence letter dated August 12, 2010). USDA-APHIS initiated a programmatic consultation with the Department of the Interior's U.S. Fish and Wildlife Service (USFWS) and submitted a biological assessment for the 17 Program states in March 2015. USDA-APHIS is currently working with the USFWS regarding completion of the programmatic consultation. That document will be used to establish mitigation measures for federally listed species during annual consultations between USDA-APHIS and the USFWS for states that are proposing suppression treatments. USDA-APHIS currently conducts annual consultations with USFWS, Ecological Services Field Offices within their state in compliance with the Endangered Species Act of 1973

(16 U.S.C. sections 1531-1536, 1538-1540) on the application of grasshopper suppression treatments for site-specific outbreaks.

## **MONITORING**

USDA-APHIS conducts surveys to evaluate grasshopper populations and to determine the extent of a grasshopper outbreak. One goal of the surveys is to minimize exposure of the public and the environment to Program-applied insecticides by basing treatment decisions on a range of economic and site-specific factors. USDA-APHIS also conducts environmental monitoring of some treatments to ensure that buffers and other mitigation measures are effective in reducing risk and that treatments are effective.

## **PUBLIC INVOLVEMENT**

A public involvement effort informed the public about the EIS and asked for suggestions and concerns related to the proposed grasshopper suppression program. Public outreach included formal public comment periods announced through the Federal Register and the USDA-APHIS Stakeholder Registry that contains almost 12,000 contacts. USDA-APHIS sent letters to all federally recognized tribal nations in the 17 Program states to provide information about the Program and provide contact information for any questions or concerns regarding the Program and the programmatic EIS. USDA-APHIS also held a follow-up conference call with tribal nations. USDA-APHIS notified Federal and State partners, and non-governmental organizations.

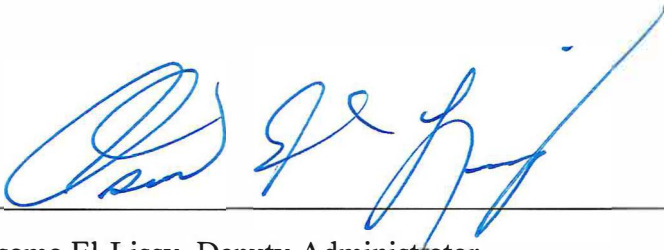
During the first public comment period (scoping), USDA-APHIS received 12 comment letters in response to the notice of intent the agency published in the Federal Register (Docket No. APHIS-2016-0045, September 1, 2016) describing its intent to prepare a programmatic EIS for the grasshopper suppression program. USDA-APHIS considered all comments in the plan of the EIS. Many comments did not raise specific issues for analysis but did provide opinions for or against the suppression program. USDA-APHIS and its cooperators recognize the public's concern about the impacts of grasshoppers and program activities on human health, ecological resources, and the physical environment and address these concerns in the EIS.

During the second public comment period, USDA-APHIS received 19 comment letters in response to the draft programmatic EIS. The USEPA published the notice of availability in the Federal Register on January 30, 2019. No comments triggered significant changes to the alternatives, environmental consequences, or cumulative impacts in the final programmatic EIS. USDA-APHIS updated the final programmatic EIS to address comments from interested stakeholders.

## IMPLEMENTATION

A minimum of 30 days has passed since the USEPA published in the Federal Register the notice of availability of the final programmatic EIS. USDA-APHIS may immediately implement the adaptive management approach (alternative 3) but must conduct site-specific environmental analyses in accordance with the National Environmental Policy Act.

## RESPONSIBLE OFFICIAL



12/2/2019

---

Osama El-Lissy, Deputy Administrator

Date

Plant Protection and Quarantine  
Animal and Plant Health Inspection Service  
United States Department of Agriculture  
1400 Jefferson Drive SW  
Washington, DC 20024