

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

## **Record of Decision for the Environmental Impact Statement for the Fruit Fly Cooperative Control Program**

### **INTRODUCTION**

Fruit flies in the family Tephritidae threaten production of a wide variety of fruits and vegetables throughout the world. Exotic (nonnative) tephritid fruit flies spend their larval period feeding and growing in more than 400 host plants. Introduction of these pest species into the United States causes economic losses from the destruction and spoiling of host commodities by larvae, costs associated with implementing control measures, and loss of market share due to restrictions on domestic and export shipment of host commodities. In addition, exotic fruit flies present obstacles to agricultural diversification and trade when they establish in new areas. Exotic fruit fly establishment in the United States would result in negative impacts to trade and the U.S. economy, due to the risks of rejection of exported fruit by other countries. The eradication of exotic fruit flies reduces damage to fruit and strengthens market acceptance for exported fruit. The introduction of exotic fruit flies into the United States has historically been due to importation of infested fruits and vegetables, and smuggling of commodities. There is also a risk of northward spread of exotic fruit flies from Mexico into the United States. The purpose of the proposed action is to protect American agriculture from the adverse effects of exotic fruit flies.

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (USDA APHIS) has a broad mission area that includes protecting and promoting the health of U.S. agriculture, and protecting and promoting food, agriculture, natural resources, and related issues. Specifically, the Plant Protection Act of 2000 (7 United States Code (U.S.C.) 7701 et seq.) provides the authority for USDA APHIS to take actions to exclude, eradicate, and control plant pests, including exotic fruit flies. Under this authority, USDA APHIS works to prevent new infestations of exotic fruit flies from entering the United States by restricting movement of items potentially infested with exotic fruit flies and by conducting programs to eradicate exotic fruit flies where they are found in the United States. A programmatic environmental impact statement (EIS) was prepared that discloses the different methods and alternatives that USDA APHIS could use to eradicate exotic fruit flies from areas in which they occur in the contiguous United States, Puerto Rico, U.S. Virgin Islands, Hawaii, Guam, Commonwealth of the Northern Mariana Islands (CNMI), and American Samoa. This programmatic EIS was prepared in accordance with: (1) the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code (USC) §§ 4321-4347); (2) regulations of the Council on Environmental Quality (CEQ) for implementing the procedural provisions of NEPA (40 Code of Federal Regulations (CFR) parts 1500-1508); (3) USDA regulations implementing NEPA (7 CFR §§ 1b, 2.22(a)(8), 2.80(a)(30)); and (4) APHIS' NEPA Implementing Procedures (7 CFR part 372).

This Record of Decision (ROD) documents the USDA APHIS decision to implement a program to eradicate exotic fruit flies in the United States and its associated territories. The preferred alternative is an integrated pest management approach that uses a variety of chemical and non-chemical methods that are implemented individually, or in combination, based on site specific conditions when an exotic fruit fly outbreak occurs.

## **BACKGROUND**

Worldwide, exotic fruit flies have a long history of being serious pests of fruits and vegetables. There is a need to eradicate these pests wherever they occur in the United States because they are among the most destructive and costly invasive species to enter the United States, have a wide host range, a high reproductive capacity, and an ability to disperse into areas distant from sites of introduction, allowing for rapid infestation of new areas.

There are at least 80 species of exotic tephritid fruit fly pests in the genera *Anastrepha*, *Bactrocera*, *Ceratitis*, *Dacus*, *Rhagoletis*, and *Toxotrypana* in tropical, sub-tropical, and temperate habitats throughout the world. The contiguous United States, Puerto Rico, and the Virgin Islands are subject to repeated introductions of one or more of these species. Of these, three species have historically posed the greatest risk to United States agriculture, especially in the southern states: the Mediterranean fruit fly, *Ceratitis capitata*, the Mexican fruit fly, *Anastrepha ludens*, and the Oriental fruit fly, *Bactrocera dorsalis*.

## **DEVELOPMENT OF THE FINAL EIS**

On August 12, 2016, the U.S. Environmental Protection Agency (EPA) published in the Federal Register a notice of intent (NOI) to prepare a programmatic EIS for the Fruit Fly Cooperative Control Program (81 FR 53398-53399) (Docket number USDA-APHIS-2016-0031). USDA APHIS also reached out to a variety of stakeholders to announce its intent to prepare a programmatic EIS. USDA APHIS public outreach activities included formal public comment periods announced through social and print media and the USDA APHIS Stakeholder Registry that contains almost 12,000 contacts. USDA APHIS also sent letters to all federally recognized tribal nations in the contiguous United States and provided information about the program and contact information for any questions or concerns regarding the cooperative fruit fly program and EIS. USDA APHIS also notified Federal and State partners, and non-governmental organizations. USDA APHIS received seven comment letters during the 45-day scoping period. USDA APHIS considered all comments in the planning of this EIS.

On April 27, 2018, the EPA published a notice of availability for the draft EIS for public comment in the Federal Register. USDA APHIS also notified interested parties of its availability. Comments received during the 30-day public comment period were addressed in the final EIS. On November 16, 2018, the EPA published a notice of availability for the final EIS in the Federal Register. USDA APHIS once again reached out to a variety of stakeholders to announce the availability of the final EIS. After the review period, USDA APHIS concluded that the

document fully analyzed the environmental effects of the proposed actions, the issues covered by the draft EIS, as well as those issues and suggestions raised during the comment periods.

## **CONSIDERATION OF ALTERNATIVES IN THE USDA APHIS ROD**

USDA APHIS considered the following alternatives in the final EIS for this ROD:

**No Action:** Under the no action alternative, USDA APHIS would maintain the program that was described in the 2001 EIS and ROD. This alternative includes methods to exclude, detect, prevent, and control (both nonchemical and chemical) fruit fly infestations. This alternative represents the baseline against which a proposed action may be compared.

**No Eradication:** Under this alternative, USDA APHIS would not control or cooperate with other governmental entities to eradicate exotic fruit flies. Any control efforts would be the responsibility of State and local governments, commercial producer or producer groups, and individual citizens.

**Quarantine and Commodity Treatment and Certification:** This alternative combines a Federal quarantine with commodity treatment and certification, as stipulated under 7 CFR part 301.32. Regulated commodities harvested within the quarantine area would not be allowed to move unless treated with prescribed applications and certified for movement outside the area. Nonchemical treatment and host certification methods that may be used in this alternative include (1) cold treatment, (2) vapor heat treatment, and (3) irradiation treatment. Regulatory certification chemical treatments may include fumigation with methyl bromide.

**Integrated Pest Management (IPM):** Under this alternative, USDA APHIS would use methods to exclude, detect, prevent, and control (both nonchemical and chemical) exotic fruit fly infestations. This alternative updates information and technologies that were analyzed in the 2001 EIS and adds the U.S. territories of Puerto Rico, the U.S. Virgin Islands, Guam, CNMI, and American Samoa. This alternative is an IPM approach, which uses several control strategies to eradicate fruit flies. This alternative would use the following components singly, or in combination:

- Establishment of a Federal quarantine
- Host survey for evidence of breeding fruit flies
- Regulatory commodity treatment and certification
- Eradication chemical applications
- Physical removal of fruit or host plants
- Mass trapping
- Male annihilation technique
- Sterile Insect Technique (SIT)

In an integrated approach, program managers would make management decisions in such a way as to protect human health, non-target species (endangered and threatened species), sensitive areas, and other components of the environment within the potential program area.

## **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The IPM alternative allows the cooperative fruit fly program the greatest flexibility to address exotic fruit fly outbreaks. The proven use of non-chemical and chemical methods of treatment reduces the likelihood of impacts to the human environment. The selective use of insecticides either in traps, bait stations, or as liquid bait applications under the IPM approach also allows for a more targeted treatment of exotic fruit flies that reduce the potential for impacts to the environment and human health. Soil treatments also pose a low risk to human health and the environment based on the use pattern and label requirements designed to reduce risk. Mass trapping and SIT control methods and other nonchemical methods used individually, or in combination with other methods, eliminate, or greatly reduce the need for insecticide use, depending on the outbreak. Insecticide use in traps, bait stations, and as a bait spray also reduces risk to human health and the environment by selectively targeting exotic fruit flies and mitigates or reduces drift or runoff that could pose a risk to human health and the environment.

## **DECISION**

USDA APHIS chose the IPM approach for addressing exotic fruit fly outbreaks in the United States and associated territories. USDA APHIS will not implement site-specific eradication projects as a direct result of the decision that will follow this EIS. Rather, USDA APHIS will prepare site-specific environmental assessments (EA) before the agency decides to implement any eradication project. EAs will address unique local issues, beyond the scope of this document, for site-specific management projects for exotic fruit fly. Site-specific EAs are more detailed and precise as to geographical locations and strategies appropriate for the type of outbreak. The decision on this EIS will serve as the primary guide for management of exotic fruit flies in the contiguous United States, including, Hawaii, Guam, American Samoa, CNMI, Puerto Rico, and the U.S. Virgin Islands. Treatments and strategies allowed by prior EA decisions will continue to be available for use. The decision whether to plan or implement an exotic fruit fly project in the United States will occur on a case-by-case basis by USDA APHIS and its cooperators.

## **RATIONALE FOR DECISION**

USDA APHIS chose the IPM alternative because it allows the greatest flexibility to the agency in eliminating various exotic fruit fly species in the United States and its associated territories while posing the least risk to human health and the environment. Site specific conditions and the various fruit fly species that can infest a variety of commodities in the United States warrant a method that allows flexibility to USDA APHIS and its cooperators in addressing outbreaks.

USDA APHIS has successfully implemented this strategy for past exotic fruit fly outbreaks and will continue to do so using its current and new management tools described in this EIS. The use of the IPM approach also reduces human health and environmental risk and cumulative impacts compared to the other alternatives. The IPM alternative provides flexibility to the Program to use site-specific measures that insure fruit fly eradication using various measures that will result in reduced pesticide use, protect host crops, and minimize cumulative economic and environmental impacts.

The no eradication and quarantine and commodity treatment and certification alternatives would allow exotic fruit fly populations to become established in the United States and its associated territories. Expected impacts from the establishment of exotic fruit flies would include economic impacts to growers and consumers as well as impacts to trade. Environmental impacts would include increased insecticide use as exotic fruit flies become established and spread to other areas in the United States and its territories. The IPM approach makes selective use of insecticides in traps and bait stations. Other insecticide treatments are made directly to soil, reducing the potential for significant drift or runoff. In the case of establishment of exotic fruit flies, there would be the expectation of broadcast insecticide treatments to increase, resulting in increased environmental loading and associated off-site drift and runoff.

#### **AVOID OR MINIMIZE ENVIRONMENTAL HARM / OTHER**

USDA APHIS recognizes the various alternatives may pose some risk to human health and the environment. USDA APHIS mitigates risks associated with the eradication strategies by imposing requirements specific to the exotic fruit fly program, and in the case of pesticide use, Federal regulations. This includes pesticide label language to reduce risk to human health, including workers and the public, and the environment. The coordination with State and other stakeholders on site-specific eradication efforts ensure the implementation of State and local requirements. Notification to the public of exotic fruit fly outbreaks, quarantines, and other control measure activities are routine for many States, further reducing the potential for risk to human health.

In the environmental consequences section of the final EIS, USDA APHIS considered the potential effects of the cooperative fruit fly program on federally listed species. USDA APHIS has consulted with the U.S. Fish and Wildlife Service (FWS) on all site-specific exotic fruit fly outbreaks. In compliance with the Endangered Species Act of 1973 (16 U.S.C. sections 1531-1536, 1538-1540), USDA APHIS will continue to consult with the FWS and—where appropriate—the National Marine Fisheries Service, on the application of exotic fruit fly eradication strategies in site-specific outbreaks. USDA APHIS will contact the appropriate field offices of the FWS as part of the environmental analysis process for site-specific projects.

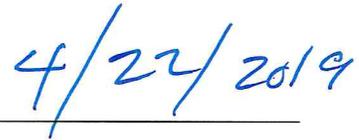
## CONCLUSION

A minimum of 30 days has passed since the EPA published in the Federal Register the notice of availability of the final EIS. USDA APHIS may immediately implement the IPM alternative but will conduct site-specific environmental analyses in accordance with NEPA. This ROD is the USDA's final decision under the NEPA process.

## RESPONSIBLE PARTY



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Date