

Finding of No Significant Impact

Expanded Spotted Lanternfly Control Program in Select States in the Midwest, Northeast, and Mid-Atlantic Regions of the United States

Final Environmental Assessment April 2023

1. Introduction

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) prepared a final environmental assessment (EA), in cooperation with government partners in 14 states and the District of Columbia, to evaluate potential impacts from expanding the existing control program for spotted lanternfly (SLF) (*Lycorma delicatula*). The EA was prepared consistent with the National Environmental Policy Act of 1969 (NEPA), NEPA implementing regulations (40 Code of Federal Regulations (CFR) 1500-1508), and APHIS NEPA implementing procedures (7 CFR Part 372) for the purpose of evaluating how the proposed action may affect the quality of the human environment.

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2. Purpose and Need

The EA was prepared to evaluate the potential impacts to human health and the environment resulting from

- Expansion of the SLF Program's geographic area to include Indiana, Massachusetts, Michigan, and Rhode Island.
- Addition of a new option for SLF egg mass removal (high pressure water treatment).
- Expansion of the use of ground-based mist blowers and high-pressure hydraulic spray treatments of bifenthrin and beta-cyfluthrin to include road rights-of-way.

3. Public Involvement

Notice of the availability of a draft version of the EA was published in newspapers within the four new states added as well as the District of Columbia. The draft EA was made available through the APHIS Stakeholder Registry and at <https://www.regulations.gov/> (Docket #APHIS-2023-0004) on 15 February 2023. The public comment period ended on 3 April 2023. APHIS received three comments. The commenters supported the SLF Program but had a few comments on the draft EA. The response to comments are included in Appendix A.

4. Environmental Consequences

The final EA indicates that implementing the proposed changes to the SLF Program as described under the preferred alternative will not have significant impacts to human health and the environment. Any or all the following Program-prescribed control activities may be used to control SLF detected in the Program area:

- use of mist blowers and high-pressure sprayers along rights-of-way
- high pressure water treatment to remove egg masses
- detection and visual reconnaissance surveys
- egg mass scraping
- herbicide applications
- insecticide applications
- regulatory control (quarantine)
- sanitation of green waste
- trap tree establishment and monitoring
- tree band and circle trap placement and servicing

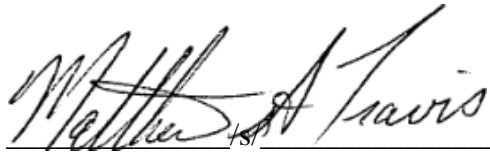
APHIS consulted with the U.S. Fish and Wildlife Service (USFWS) regarding the potential impacts of the SLF Program to federally listed species. To date, APHIS has received concurrence from USFWS for the SLF Program proposed for Indiana, Massachusetts, Michigan, and Rhode Island. APHIS also received concurrence from the National Marine Fisheries Service (NMFS) regarding implementation of the SLF Program in locations involving U.S. coastal waters. APHIS will implement protection measures for federally listed species and critical habitat in each state and the District of Columbia prior to the initiation of Program activities. No SLF Program activities will occur in these locations until consultation has been completed with the USFWS and NMFS, as appropriate.

With APHIS' oversight and guidance, State and local agencies will reach out to potentially affected landowners and residents in or near areas receiving chemical applications. Every property owner and resident, including individuals identified as being part of an underserved population, will be notified via phone, text, email, doorhanger, in-person communication, or some combination of these methods. With the assistance of local authorities, special consideration will be given by the SLF Program to any underserved populations in the treatment areas to ensure meaningful engagement about the treatments has occurred. Protective measures on labels are meant to safeguard not only the applicator, but the public as well, including children. All labels will be followed. No disproportionate adverse effects to minorities, low-income populations, or children are expected. No significant release of greenhouse gases or adverse effect on global climate is likely to occur from implementation of the SLF Program under the preferred alternative.

APHIS sends notification of proposed SLF Program actions and changes to federally recognized Tribes within or around potential treatment areas. While APHIS believes the proposed SLF Program is unlikely to affect Native American sites and artifacts, Tribes should contact the agency if APHIS overlooked or failed to anticipate ways their Tribe may be affected by the SLF Program. Lastly, SLF control activities are not currently anticipated at historic properties;

however, if such treatments become necessary, they will be coordinated with local managers of historic properties to ensure the Program does not adversely impact historic properties pursuant to Section 106 of the National Historic Preservation Act.

I have determined that there would be no significant impact on the quality of the human environment from the implementation of the preferred alternative. My finding of no significant impact is based on the results of the analysis in the final EA. Since I have not found evidence of significant environmental impacts associated with the proposed action, I further find that no additional environmental documentation needs to be prepared and that implementation of the preferred alternative may proceed.

A handwritten signature in black ink that reads "Matthew Travis". The signature is written in a cursive style and is positioned above a horizontal line.

Matthew Travis
National Policy Manager
Plant Protection and Quarantine
Animal and Plant Health Inspection Service

04/27/2023

Date

Appendix A. Responses to Comments

Comment 1: The stakeholders, including the maple industry, should be included.

Response: Several industries related to grapes, stone fruits such as apricots and other fruits such as apples, trees, commercial nurseries, and forestry could be impacted by SLF introduction and expansion. APHIS is concerned about agricultural and other resources that could be impacted by SLF and regularly interacts with representatives of these agricultural industries. This was touched on in Section 1.A. We believe the EA described the crops that could be impacted and added maple as an industry that could be affected and was discussed in Section III.B. We believe the EA provided sufficient information to make a decision.

Comment 2: The financial cost of damage from SLF should be analyzed in-depth to benefit policy makers.

Response: A few studies have analyzed the potential damage monetarily that can be done by SLF to agriculture and other industries. These were discussed in Section I.A. These provided the necessary information for reaching an informed decision on costs that could be incurred by agricultural producers and others in the United States (e.g., in Pennsylvania alone it was estimated that SLF could cause about \$43 million in damages annually).

Comment 3: Ecological mechanisms that facilitate the spread of SLF should be researched.

Response: We agree. This type of information is helpful to delineate infestations and potential spread, where to find SLF, and additional damages that they may incur. Research is conducted on various pests including SLF, but mostly this is outside the scope of the EA. The EA covers the elimination of the pests where found.

Comment 4: Early detection and egg removal are vital to reduce the severity of future infestations.

Response: We agree. Early detection and rapid response is a tenant of invasive species control including egg, larva, and adult removal with the methods outlined in the EA. The faster an infestation is eradicated, the less resources are necessary to stop it.

Comment 5: *Ailanthus altissima* is also an invasive species and the preferred host plant for the SLF. I suggest adding preventative measures to stop the spread of these trees within affected regions. Instead of waiting for trees to become infested, remove the trees to prevent the spread of SLF particularly in areas with grapes, apples, stone fruit, and logging industries

Response: *Ailanthus altissima* trees are removed within a quarter mile of outbreaks – See section II.A.4 and 6. This minimizes spread of SLF. At this point, APHIS does not have the resources to remove them over the landscape.

Comment 6: High pressure water treatment for eggs can strip away the outer layer of bark making trees vulnerable to other pests and diseases. Though not concerning for the invasive

Ailanthus altissima, if native trees happen to be infested by SLF, using high water pressure on them might lead to more damage done to those populations.

Response: We agree. Only *Ailanthus altissima* and inanimate objects will be sprayed and was discussed in section II.A.4.

Comment 7: Geographic Information Systems can be used to perform theoretical modeling of their potential distribution across spatiotemporal scales can assist with preventative restoration efforts.

Response: We agree. One such modeling was discussed in Section 1.A, Wakie et al. (2020), which assessed the risk of SLF becoming established in the U.S. using the ecological niche model MAXENT. APHIS uses many models in developing tools to use in the battle against SLF.

Comment 8: Shifting toward preventive restoration tactics and deviating from reactionary restoration methods is key to ensuring the longevity and endurance of ecosystems and their respective services.

Response: We are addressing the current outbreak of SLF. Thus, much of this is reactionary (early detection and rapid response). Much effort is put into preventative actions by APHIS at ports of entry and regulations on shipments of commodities from foreign countries to avoid invasive species introductions. We believe we have preventative measures in place. The EA spells out the actions that will be taken to address current outbreaks of SLF.

Comment 9: Many of the current methods of dealing with this invasive species seem well thought out to increase efficiency and reduce bycatch.

Response: Thank you for comment.

Comment 10: The most concerning part of the plan is the mist blowers being used. More specifically, the insecticides being used with them. Bifenthrin helps control a wide variety of insects and mites. Without more direct means of application, many beneficial or unrelated insects would be killed as well. More important to bring up is Beta-cyfluthrin. This pesticide is highly toxic to fish and invertebrates. Introducing this pesticide into the ecosystem in larger amounts, especially near waterways, can do immense damage to the species that live there if not adequately controlled.

Response: We agree with your concerns. Pesticides including bifenthrin and beta-cyfluthrin and application methods including mist blowers, label restrictions, and mitigation measures were discussed in Sections II.A and III.A.2. Appendix A: Aquatic ecological risk assessment for the application of bifenthrin and β -cyfluthrin using ground-based mist blower and high-pressure hydraulic treatments for SLF discussed aquatic risks in detail. We believe that mitigation measures are in place to minimize nontarget take and impacts to aquatic resources yet stop SLF from spreading.

Comment 11: Collecting data regarding the Spotted Lanternfly's physiological qualities is essential in generating a mechanism for its removal that will specifically target the insect without reaping negative cascade effects on surrounding ecosystems. While pesticides may be a powerful tool in eradicating harmful species, it is often non-precise in its application, meaning its distribution often negatively impacts organismal communities beyond the targeted species.

Response: We agree mostly with your statement. However, APHIS uses the available pesticides after careful consideration of impacts and these were discussed throughout the EA what tool are available to eradicate SLF from areas where they have been found as is discussed in the EA. Research is always looking for better treatments that effective, safe, and have less or no environmental consequences.

Comment 12: I understand that there aren't many other cost-effective ways to control adult populations of SLF. All I ask is that you take this comment into consideration to help prevent unintended damage to the ecosystem.

Response: As discussed in the EA, APHIS is concerned about negative environmental consequences of the use of all methods and uses the methods judiciously and with the least impacts to nontarget species and ecosystems. APHIS agrees with this comment and strives for minimal impacts from this action but attempts to eradicate all SLF outbreaks.