

## Update on Vulnerable Species Pilot (November 2023)

### Introduction

Consistent with the Agency's April 2022 Pesticide ESA Workplan, EPA released the Draft Vulnerable Species Pilot (VSP) white paper on June 22, 2023. In the draft VSP white paper, EPA identified 27 federally threatened and endangered (listed) species that are vulnerable to pesticides, proposed mitigation to protect them by minimizing or avoiding pesticide exposure, and described an approach to implement the mitigation in certain future pesticide decisions. EPA's goal is to proactively reduce the likelihood of population level impacts to these listed species and their critical habitats. For each species, EPA proposed geographically specific mitigation using pesticide use limitation areas (PULAs) to indicate where the proposed mitigation would apply, including for most outdoor uses of conventional pesticides. The VSP does not change any individual pesticide mitigation but is a framework for how the Agency intends to build in protections as part of its registration and registration review processes which already offer additional opportunities for stakeholder input.

EPA provided a 45-day public comment period on the draft VSP white paper and associated technical document. EPA received more than 10,000 comments from diverse groups, including states, other federal agencies, the pesticide industry (e.g., pesticide companies, applicators), grower groups, academics, environmental groups, and individuals. EPA received approximately 200 unique comments, with the remainder being from a mail-in campaign in support of the VSP. In general, supportive commenters reiterated the importance of protecting federally listed species. EPA also received comments identifying concerns with aspects of the proposal and suggested revisions. EPA has been evaluating the public comments and determining next steps. The Agency had previously committed to provide updates on whether it expects to revise the proposed mitigations and include additional measures in the pilot after consideration of public comments. Through this document EPA is providing that update, and in light of the public comments received, expects to make some revisions, and incorporate them as part of implementing the VSP.

The Agency appreciates all stakeholder and federal and state partner perspectives. After considering their input, EPA determined that refinements to the proposal are necessary, including to where protections for some of the 27 species are most needed so that the Agency can better target those protections while minimizing restrictions to pesticide users. EPA is currently working on revisions to achieve this goal.

The purpose of this document is to summarize the major themes in the public comments and to provide the public with EPA's current thinking on potential revisions to the VSP. EPA intends to provide additional updates on the VSP by the fall of 2024. The list below summarizes EPA's current thinking regarding modifications it plans to make to the VSP framework based on the received comments as follows:

- Refine the proposed PULAs by (1) mapping species habitats explicitly, rather than using text to describe habitats to which the PULA is meant to apply and (2) reduce the PULAs to only include locations within the species' ranges that are most important for species conservation;
- Clarify the scope of the VSP for non-agricultural uses;
- Clarify potential exemptions to the proposed mitigation and whether additional exemptions are needed;

- Revise some of the proposed mitigation and include additional mitigation options specific to non-agricultural uses and specialty crops;
- Revisit how EPA selected the pilot vulnerable species; and
- Develop a consistent approach for the various strategies to reduce pesticide exposure to listed species from spray drift and run-off.

## Summary of major themes in public comments and potential changes to proposed mitigations

### **Pesticide Use Limitation Areas (PULAs)**

*Summary of public comments:* Commenters universally requested EPA to re-consider its approach. First, commenters asserted that EPA proposed overly broad PULAs and requested that EPA refine them such that they represent the best available location information of the species rather than the entire range. They also asked EPA not to rely on habitat descriptions and instead to put resources into explicitly mapping habitat locations to inform the PULAs.

*EPA's current thinking on updating the PULAs:* The purpose of a PULA is to represent those areas where mitigation would apply. For some of the 27 species, EPA incorporated available refined PULAs from formal pesticide consultations with the U.S. Fish and Wildlife Service (FWS). But for most species, EPA proposed to use their current range to represent the extent of the PULAs. In addition, in some cases, EPA proposed that mitigation would only be needed within a PULA when a specific habitat type is near the pesticide application site. In those cases, as proposed, pesticide users would determine if they need to employ mitigations based on descriptions of the species' habitats. These areas should reflect where a vulnerable species is likely to be exposed to pesticides.

EPA agrees that it should evaluate approaches to refine the PULAs to ensure they are limited to the overlap between the vulnerable species and exposure areas. To this end, in collaboration with FWS and the U.S. Department of Agriculture (USDA), EPA is partnering with the University of Georgia (UGA) to determine where refinements to PULAs are necessary. The purpose of this partnership is to integrate available information on species location and likely pesticide exposure areas to identify specific locations where pesticide mitigations would apply, while minimizing impacts to pesticide users. UGA and the federal agencies will work together using the best available information to develop an approach for potentially refining PULAs for this pilot and for future efforts.

### **Including non-agricultural uses and mitigation for those use sites**

*Summary of public comments:* Commenters requested clarification on the applicability of the effort to various non-agricultural uses. Some also commented that EPA should include residential uses. Many non-agricultural commenters expressed concerns as to the lack of available mitigations for non-agricultural uses.

*EPA's current thinking on non-agricultural uses and mitigations in the VSP:* EPA proposed to apply the VSP mitigation to all outdoor uses of conventional pesticides, except residential uses. EPA agrees it needs to clarify the scope of this effort as it applies to non-agricultural uses. In the time since the

proposal was issued for public comment, EPA has considered additional input from FWS species experts, non-agricultural user groups (e.g., American Mosquito Control Association), and publicly available FWS species information (e.g., Status of Species Assessments) regarding the types of pesticides cited as impacting each of the proposed vulnerable species. Based on that information, EPA is considering refining the scope of the VSP to include the following non-agricultural uses across multiple species at this time: mosquito adulticide applications, applications to rangeland, forestry related treatments, and invasive species management. If EPA covers these uses under the VSP, it will add more relevant and appropriate mitigation measures to minimize exposure from these uses where there is overlap with a vulnerable species.

## **Exemptions**

*Summary of public comments:* Commenters requested more clarity on the proposed exemptions, specifically which uses/types of applications qualify for exemptions and what measures would be adopted to ensure that applicators are, in fact, meeting the exemption specifications. Commenters also asked EPA to clarify the term “spot treatment” for purposes of the VSP exemption. Further, commenters asked EPA to exempt tree injection and chemigation application methods because they assert these application methods do not lead to run-off/erosion or spray drift. Several universities commented that their agricultural research fields fall within proposed VSP PULAs and that research activities should be exempt.

*EPA’s current thinking on exemptions from the VSP:* EPA proposed exemptions to the draft mitigation for some application methods or types, including spot treatments, or when pesticide users are enrolled in conservation programs. EPA is considering clarifications for when an exemption applies and what application methods or types may be appropriate for exemptions. This effort largely depends on whether the scope of the VSP changes in ways that the exemptions could be different for agricultural versus non-agricultural use sites. For example, a spot treatment for agriculture is very different than targeted treatments for mosquito control.

EPA is continuing to explore clarifications for potential exemptions for local conservation efforts that benefit a vulnerable species, in partnership with the USDA. EPA discussed a similar proposed exemption for the draft herbicide strategy framework that was separately issued for public comment and will update its thinking after it has reviewed and considered comments on that strategy.

## **Proposed Mitigations**

*Summary of public comments:* Commenters expressed concerns regarding FWS resources and ability to coordinate with pesticide users in advance of applications and how this process would work. Many also asserted that because of the difficulty avoiding some areas, coordination with FWS was essentially a requirement. Further, commenters asserted that the proposed 40% reduction in application rate was not a feasible mitigation measure in many instances. Commenters noted that the proposed VSP mitigations are not consistent with other efforts such as the FIFRA Interim Ecological Mitigations and the proposed herbicide strategy, which include a mitigation menu to minimize run-off/erosion to provide flexibility to pesticide users to choose mitigations that work best for their situation. Commenters requested that EPA develop a single set of mitigations that can apply to all of the proposed and upcoming strategies, with most favoring the approach proposed in the herbicide strategy. Similar to comments about the lack of mitigations for non-agricultural uses, commenters also expressed concerns

about the lack of mitigations for minor and specialty crops and suggested additional minimization mitigations.

*EPA's current thinking on updating the proposed mitigations:* The proposed mitigations in the VSP follow the Services' preferred approach for mitigations: avoidance, minimization, and offsets (in that order). Where EPA proposed avoidance areas, it included an alternative if the pesticide user first coordinates with their local FWS office. EPA agrees it needs to consider what revisions are necessary to some of the proposed mitigation. The Agency expects that additional measures specific to minor and specialty crops, as well as non-agricultural uses as described above, are necessary.

Regarding minimization measures, EPA shares the goal of developing a consistent approach for the various strategies to reduce pesticide exposure to listed species from spray drift and run-off. As necessary, after considering comments received on the draft herbicide strategy, EPA will update the VSP.

Regarding comments about coordinating with the local FWS in lieu of avoidance, EPA acknowledges the concerns associated with the proposed avoidance alternative to confer with the local FWS and the FWS resources that would be needed to implement this approach. EPA based this proposal on the same approach for mosquito adulticides in the recent FWS malathion biological opinion and notes that FWS is working to better define this process. EPA will continue to provide updates as these conversations progress.

EPA's current thinking for agricultural uses is that the proposed VSP mitigation would not need to include avoidance, but rather would focus on minimization. After receiving public comments and further discussions with FWS, EPA determined that the result of pesticide applicators conferring with FWS on local agricultural applications would most likely resemble the minimization mitigations already proposed in the VSP white paper. As a result, EPA is considering revising the proposed mitigation for agricultural uses to only require minimization, not avoidance. This would alleviate the need to coordinate with FWS before agricultural applications. However, EPA anticipates that some of the non-agricultural uses identified above may likely continue to be within the scope of the VSP, and may still require avoidance or coordination with FWS field offices where a user wants to apply a pesticide.

### **Selection of the vulnerable species**

*Summary of public comments:* Commenters argue that the selection process for pilot species was not well described, that the stressors identified in the FWS vulnerability narrative are subjective, and that pesticides are not the sole cause of species decline. Also, commenters suggest that the current list was not developed with direct consultation with FWS and NMFS. Commenters recommend providing more details on the process used to select vulnerable species and more explanation of the factors considered. Commenters criticize EPA for claiming that all of the species in the VSP have limited geographic ranges and recommend that EPA provide more specific criteria that better defines limited or small ranges and/or critical habitat.

*EPA's current thinking on the selection of the proposed vulnerable species:* The initial selection of the proposed vulnerable species followed a set of defined criteria that considered vulnerability of the species to pesticide impact, the size of the range and/or critical habitat, the overlap of the range with other listed species, the population size of the species, the population trajectory, and the cultural significance to Tribe(s). The intent of the VSP is to identify mitigation measures that would protect

species that EPA, in coordination with FWS, has identified as vulnerable to pesticides. For the species that EPA identified for this pilot, FWS concluded that they have high or medium overall vulnerability<sup>1</sup> and pesticides have already been identified as a stressor to the species (e.g., in status of species assessments, biological opinions or EPA biological evaluations). Additionally, EPA noted that these pilot species have smaller ranges relative to other listed species, and many of their ranges or critical habitats overlap with those of other listed species. Since the issuance of the VSP proposed mitigations, EPA has proposed or will soon propose additional strategies to minimize exposure to groups of pesticides and has continued to discuss the VSP with the FWS species' experts about the original 27 species that EPA proposed for this pilot. In addition, EPA expects to revisit the list of species in light of the other strategies.

### **Need to account for different impacts of pesticides**

*Summary of public comments:* Commenters generally requested that EPA reconsider applying an approach that does not consider the risk profile of a chemical. Several commenters also noted that this pilot effort should not supersede any successful FWS consultations nor include pesticides with “no effects” (NE) determinations by EPA.

*EPA's current thinking on updating the VSP:* In the proposed approach, the same set of mitigations would apply to most outdoor conventional pesticides without consideration of their characteristics and any likelihood of effects to the vulnerable species. EPA is exploring the use of its long established, tax-based FIFRA risk assessment methods to assess potential impacts to vulnerable species. EPA is considering only applying mitigations for pesticides when they are likely to impact a vulnerable species through direct toxicity or effects to its prey/diet, pollination, habitat, or dispersal. EPA believes that using its FIFRA assessment coupled with life history information specific to the vulnerable species would provide a robust basis for identifying when mitigations apply to a specific pesticide and species. The FIFRA risk assessment is effective at assessing risk to a single individual. This approach aligns with the intent of the VSP to protect species impacted by pesticides and for which minimal pesticide impacts could result in jeopardy. EPA will provide updates as it considers this approach.

Where EPA has completed a formal consultation with FWS for a pesticide that considered one of these pilot species, mitigations determined through the consultation process would supersede the VSP mitigations. Similarly, where EPA has conducted effects determinations and made a no effect determination, the VSP mitigations would not apply. EPA expects that when it makes not likely to adversely affect determinations for the pilot species, that VSP mitigations would not apply assuming the FWS concurs.

### **Next steps**

EPA recognizes that the VSP proposal represents a new approach that has benefited and will continue to benefit from stakeholder engagement and feedback. EPA appreciates the thoughtful comments from multiple stakeholders on the proposed VSP and other ESA efforts. To be responsive to the comments and to arrive at practical mitigation measures, EPA is issuing this update. EPA continues to consider the

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<sup>1</sup> USFWS 2022. Biological and Conference Opinion on the Registration of Malathion Pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act. U.S. Fish and Wildlife Service Ecological Services Program. February 28, 2022. Available at <https://www.epa.gov/endangered-species/biological-opinions-available-public-comment-and-links-final-opinions>.

public comments, meet with stakeholders, and collaborate with the U.S. Fish and Wildlife Service (FWS), the U.S. Department of Agriculture (USDA), and state agencies. By fall 2024, EPA intends to provide additional updates on the VSP.