

Vulnerable Species Pilot Project

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Overview for Public Webinar Jerrett Fowler, Acting Senior Scientist Nicole Zinn, Team Leader Office of Pesticide Programs



Draft for Public Comment



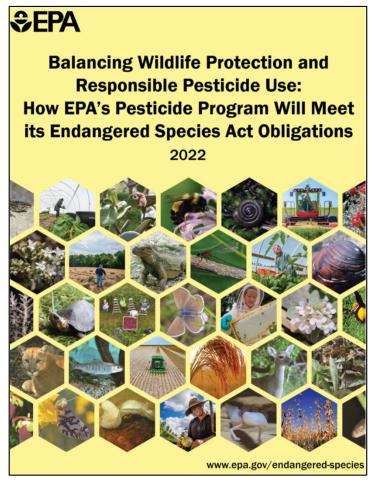


Draft for Public Comment

Purpose of this webinar:

- To provide an overview of the draft Vulnerable Species (VS) Pilot released on 6/22 for a 45-day public comment period
- Docket is available here:
 EPA-HQ-OPP-2023-0327
 - Includes the Vulnerable Species White paper and supporting Technical Document
- Comments are due 8/06/2023

EPA's Pesticide Programs ESA Workplan



Released April 2022



ESA Workplan Website

Pilot Projects Website

Draft for Public Comment

Outline of Presentation

- Overview of the Vulnerable species pilot project
 - Pilot species
 - Proposed mitigations
 - Evaluation
 - Technical Document
 - Proposed implementation
 - Possible expansion
- Outreach and timeline
- StoryMap demo











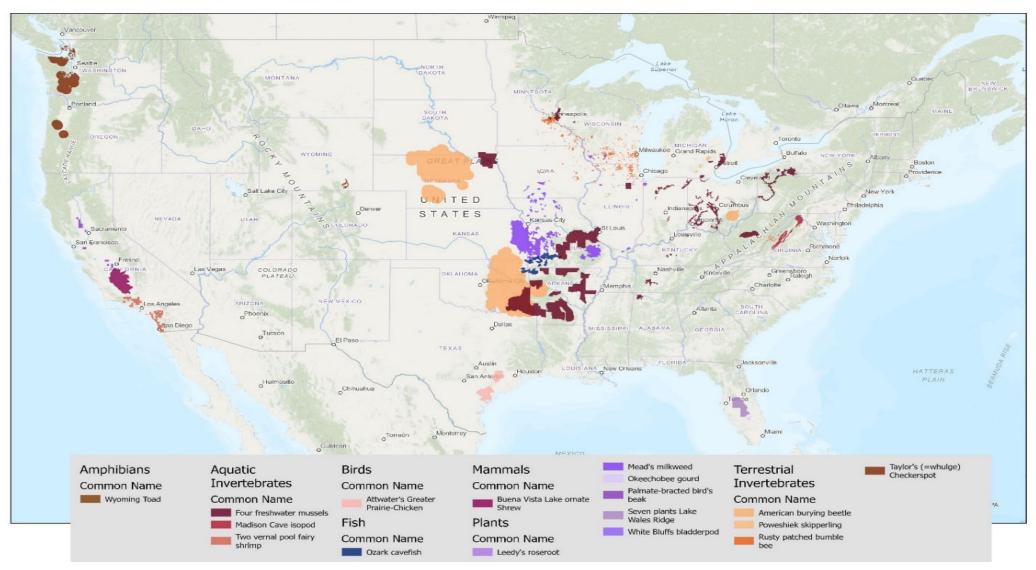
Pilot species

- Criteria
 - Fish and Wildlife Service has categorized species as high or medium vulnerability
 - Limited ranges
 - Pesticides identified as a potential stressor
- Approximately 20 species or groups of species representing diverse taxa
 - Plants
 - Terrestrial and aquatic invertebrates
 - Vertebrates (fish, amphibian, bird, mammal)
 - Variety of habitats (e.g., grassland, streams) and locations

Pilot Vulnerable Species

- Insects
 - Poweshiek skipperling
 - Rusty patched bumble bee
 - Taylor's checkerspot
 - American burying beetle
- Aquatic invertebrates
 - Madison cave isopod
 - Riverside and San Diego fairy shrimp
 - Ouachita rock pocketbook (mussel)
 - Rayed bean (mussel)
 - Scaleshell mussel
 - Winged Mapleleaf (mussel)

- Plants
 - Lake Wales Ridge species
 - Mead's milkweed
 - Leedy's roseroot
 - Okeechobee gourd
 - Palmate-bracted bird's beak
 - White bluffs bladderpod
- Fish, Amphibians, Birds, Mammals
 - Ozark cavefish
 - Attwater's greater prairie chicken
 - Buena Vista Lake ornate shrew
 - Wyoming toad



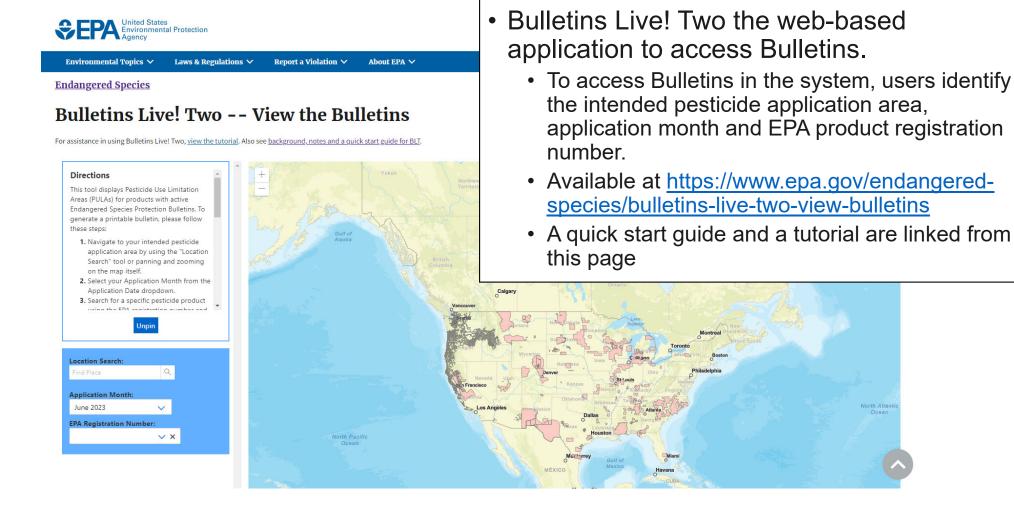
Locations of ranges and designated critical habitats (if available) of 27 vulnerable pilot species.

Proposed mitigations

- Plan to implement using Bulletins Live! Two
- Bulletins include two parts:
 - Location (referred to as a "Pesticide Use Limitation Area")
 - Mitigations (referred to as "Pesticide Use Limitations")
- Pesticide Use Limitation Areas are based on
 - Species' ranges
 - And critical habitat if available
- Three types of mitigation
 - Avoidance
 - Spray drift minimization
 - Runoff minimization



Bulletins Live! Two (BLT)



Bulletins contain enforceable pesticide use

critical habitat.

limitations to protect ESA-listed species or

Summary of draft mitigations

- Broadly applicable to most outdoor uses of conventional:
 - Insecticides
 - Insect growth regulators
 - Herbicides
 - Fungicides
 - Miticides
- Rodenticides excluded because they will be addressed with rodenticide strategy





Summary of draft mitigations

- Avoidance
 - Prohibit use in key areas inhabited by species
 - Provide exceptions if user gets input from Fish and Wildlife Service field office
- Minimization of spray drift
 - Different requirements based on application equipment and droplet sizes
 - Wind directional
 - Windbreak exception
 - Larger buffer distances proposed for the pilot terrestrial insect and plant species due to the susceptibility of these species to pesticides as a stressor

Summary of draft mitigations cont'd

- Minimization of runoff transport
 - Based on existing mitigations available to growers and pesticide applicators
 - Users would select 4 practices from mitigation menu
 - Runoff mitigations do not apply to 2 species, as this was not identified as a route of exposure
- Timing restrictions
 - EPA considered the life histories of the pilot species to determine if restrictions could be limited to specific periods of time to maximize species protection and minimize impact to the user
 - Only certain species have proposed timing restrictions



Runoff Mitigation Menu

• EPA recognizes efficacy information on additional practices may become available over time and is currently thinking about ways to expand the menu to include additional options as appropriate.

Table 4. Draft options for runoff/erosion measures for selected pesticide use site1.

| Runoff/Erosion Mitigation Practice | Use Site | | | | |
|---|--------------------------------|----------------|------------------------------------|------------------------|----------------------|
| | 1: Field Crops ² | 2: Orchards | 3: Specialty Crops ³ | 4: Non-Ag ⁴ | 5: Rice ⁵ |
| | | Application | ns | · | |
| Avoid Using Pesticide of a Highly Toxic Hazard Class to invertebrates | ~ | ~ | ~ | ~ | ~ |
| 40% rate reduction ⁶ | ~ | ~ | ~ | ~ | ~ |
| | | In Field | | | |
| Contour Farming | ~ | ~ | ~ | | |
| Cover Crop | ~ | ~ | ~ | ~ | |
| In-field Vegetative Filter Strip ⁷ | ~ | ~ | ~ | ~ | |
| Mulching | ~ | ~ | ~ | ~ | |
| Residue and Tillage management | ~ | | ~ | | |
| Terrace Farming | ~ | ~ | ~ | | |
| Grassed Waterways | ~ | ~ | > | ~ | |
| | ı | Field Characte | ristics | | |
| Field with <2% slope | ~ | ~ | ~ | | ~ |
| Adjacen | t to the Field | or In-betweer | n field and Protec | ction Area | |
| Vegetative Filter Strips ⁷ | ~ | ~ | ~ | ~ | |
| Riparian Area (>10m width from average high-water mark to use site) | ~ | ~ | ~ | ~ | |
| | (| Controlled Dra | inage | | |
| Constructed wetlands or Water and Sediment Control Basins | ~ | ~ | ~ | ~ | ~ |

Proposed Exemptions to Mitigations

- Applications for purposes of conservation made under the purview of the Fish and Wildlife Service
- Residential Uses and Indoor Uses, mitigations are only for nonresidential outdoor uses of conventional pesticides
- Rodenticides
- Exempt from runoff mitigations if the lands are managed with a sitespecific runoff and/or erosion plan implemented according to the recommendations of a recognized conservation program



Evaluation of Mitigations

- Selected approximately 20 representative pesticides
- These pesticides were used to assess the effectiveness of proposed mitigations when compared to anticipated exposure reduction to toxicity values
- Considered efficacy information compiled in Technical Support Document for proposed reductions

Draft Implementation Plan - Bulletins

- Proposing a multi-pronged implementation plan to get Bulletins Live! Two reference language and link on product label
- Mitigations will be required once EPA has established the relevant Bulletins and the label has the BLT link.
- BLT language will be added through registration and registration review activities
- Release policy statement that allows adding BLT link voluntarily through non-notification
- Longer term: Evaluate whether further policy/rulemaking is needed



Draft Implementation Plan - Outreach

- StoryMaps and other materials will allow growers and applicators to determine whether they routinely apply pesticides near the pilot species
 - Available before full implementation BLT references on pesticide product labeling and creation of Bulletins
 - StoryMaps are intended for informational purposes only; not to be interpreted as regulatory
- Planning outreach and education efforts on use of the BLT on-line system, compliance with label directions, and Bulletins

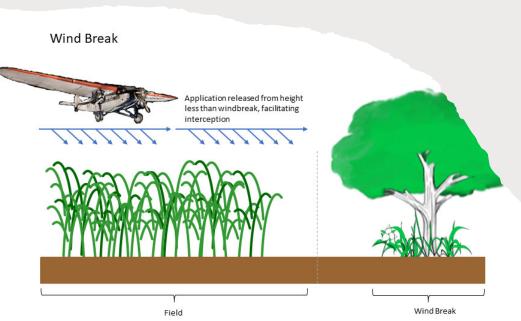




Possible expansion to other species

- Continue to focus on narrow ranging species
- Include species that we have identified as particularly vulnerable through various consultations and projects
- Mitigations evaluated for similar species can likely be applied to those additional species

Coordination across ESA efforts



- Continue to work with other ongoing ESA efforts
- To the extent possible, EPA expects to align runoff mitigation menu options with Herbicide Strategy, FIFRA Interim Ecological Mitigations, and any other future efforts using the mitigation menu



Outreach and Timeline

- June 22 released white paper and technical support doc for public comment
 - 45-day comment period (closes 8/6/23)
- USDA hosted public webinar
- Fall webinars and outreach / education with stakeholders on Bulletins Live! Two and Bulletins more generally
- Goal is to finalize mitigations for pilot species in December

Demonstration of StoryMaps



Vulnerable Species Project

Implementing EPA's Workplan to Protect Endangered and Threatened Species from Pesticides: Vulnerable Species Pilot Project

Office of Pesticide Programs

Get started

