



OPP Efforts Towards ESA

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ESA WORKPLAN UPDATE:

Nontarget Species Mitigation for Registration Review and Other FIFRA Actions



November 2022

ESA Workplan Update - November 2022

- FIFRA Interim Ecological Mitigation
- Endangered Species Protection Bulletins and Bulletins Live Two!
- Additional ESA Strategies



OPP's Strategies for Endangered Species Act

- ▶ FIFRA Interim Ecological Mitigation (“IEM”)
- ▶ Vulnerable Species Pilot
- ▶ Herbicide Strategy
- ▶ Regional Strategies: Hawaii
- ▶ Grouped Risk Assessments, e.g., 11 Rodenticides

FIFRA Interim Ecological Mitigation

- EPA has developed a menu of FIFRA Interim Ecological Mitigation measures
 - Focuses on agricultural crops uses of conventional and biological pesticides
 - Proposing in registration review, to be adapted to new use registrations
 - To be adjusted to account for varying risks and benefits of the pesticide
 - Proposed for inclusion on product labels (not Bulletins)
- FIFRA Interim Ecological Mitigation measures do not include
 - Pesticide-specific measures (e.g., application rate reductions)
 - Listed species-specific mitigation measures being developed for ESA Pilots
 - Mitigation measures being developed for listed species under Additional ESA Strategies



FIFRA Interim Ecological Mitigation

- Other Proposed Label Language
 - Requiring Link to Bulletins Live! Two (BLT) System
 - Advisory language for insect pollinators
 - Pollinator Hazard Statement
 - Best Management Practices for Pollinator Protection
 - Incident reporting language
 - Treated seed language
 - Labeling for Products with Seed Treatment Uses
 - Instructions for Seed Bag Tags



FIFRA IEM Public Comments - Next Steps

- ▶ Comprehensive comment review for each topic area, based on
 - ▶ ESA Workplan Update Appendix comments
 - ▶ Public comments on proposed decisions - atrazine, carbaryl, dicloran (DCNA), etofenprox, methomyl, norflurazon, thiophanate methyl and carbendazim (TM/MBC)
- ▶ Update mitigation and other label statements for forthcoming EPA decisions, considering
 - ▶ Additional mitigation proposed in comments
 - ▶ Mitigation opportunities and challenges identified for different regions and crop uses
 - ▶ Specific label language recommendations

Strategies to Expedite Progress on ESA Workplan

- Vulnerable Species
 - Identify mitigation measures for a subset of listed species with limited ranges and where pesticides identified as a stressor
- Group assessments and mitigations based on:
 - Pesticide type or use
 - Ex. Herbicides - broad approach to address spray drift and runoff from treated fields to minimize exposure to listed plants avoiding jeopardy/ adverse modification.
 - Region
 - Develop a cross-pesticide approach to address listed species and designated critical habitats in Hawaii

Vulnerable Species Pilot

- Develop a broad approach to reduce spray drift and runoff transport from treated fields to minimize exposure to a subset of listed species that are particularly vulnerable to pesticides
- Goal is to reduce the likelihood of jeopardy and adverse modification for these federally listed species and their critical habitats
- Scope
 - 27 species with well defined ranges

Pilot species

- ▶ **Insects**

- ▶ Poweshiek skipperling
- ▶ Rusty patched bumble bee
- ▶ Taylor's checkerspot
- ▶ American burying beetle

- ▶ **Aquatic inverts**

- ▶ Madison cave isopod
- ▶ Riverside and San Diego fairy shrimp
- ▶ Ouachita rock pocketbook
- ▶ Rayed bean
- ▶ Scaleshell mussel
- ▶ Winged mapleleaf

- ▶ **Plants**

- ▶ Lake Wales ridge species (n = 7)
- ▶ Mead's milkweed
- ▶ Leedy's roseroot
- ▶ Okeechobee gourd

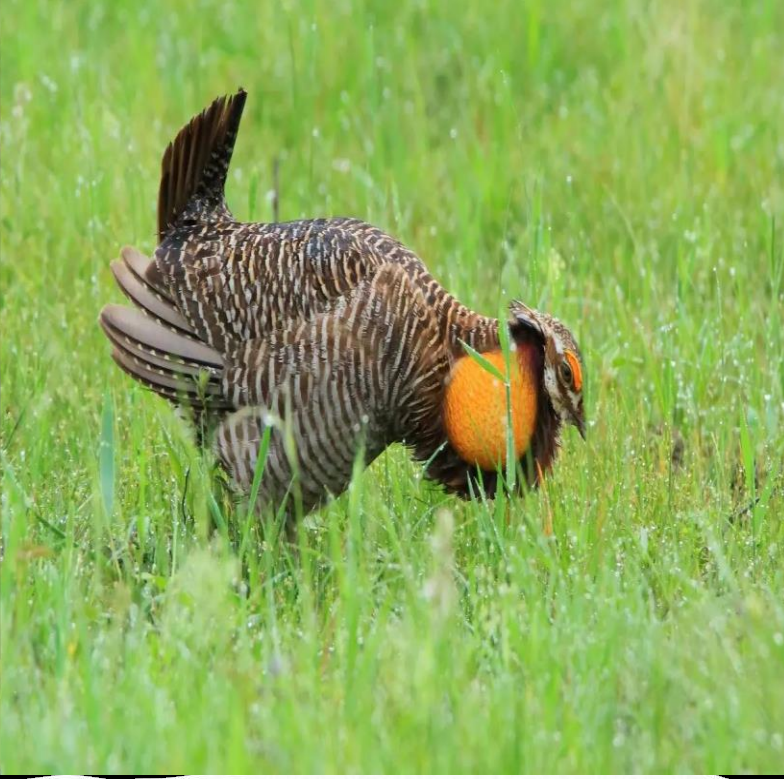
- ▶ Palmate-bracted bird's beak
- ▶ White bluffs bladderpod

- ▶ **Fish, Amphibians, Birds, Mammals**

- ▶ Ozark cavefish
- ▶ Attwater's prairie chicken
- ▶ Buena Vista lake ornate shrew
- ▶ Wyoming toad

Approach to Drafting Mitigations

- Proposed Mitigations captured in draft bulletins
 - Identified pesticide use limitation areas (PULAs)
 - Drafted pesticide use limitations as proposed language for bulletins
- Proposed Mitigations intended to be as simple and broad as appropriate
 - Apply to application method
 - Likely to be applied broadly to pesticides (if no specific pesticide use in the PULA, then no mitigation required)
- Where it makes sense, apply the same mitigations across species
 - Consider species life history, habitat, relevant use sites
 - Consider species-specific timing restrictions, as appropriate
 - Mitigations could include avoidance in key areas inhabited by species



Vulnerable Species Pilot Timeline

Released for
Public Comment
June 2023

Consideration of
Comments
Fall 2023

Final Mitigations
Released
December 2023

Herbicide Strategy

- Develop a broad approach to reduce spray drift and runoff transport from treated fields to minimize exposure to listed plants and listed species that depend on plants from the use of herbicides
- Goal is to reduce the likelihood of jeopardy and adverse modification for federally listed plants and listed species that depend on plants
- For future herbicide biological evaluations and consultations, EPA and the Fish and Wildlife Service (FWS) would focus on potential effects not addressed in this strategy
 - Example: effects to animals on the treated field or newly listed species
- Scope
 - Agricultural use patterns
 - Listed plants in the conterminous United States
 - Listed species that depend on plants

Tembotrione
(238 ml/ha) + Stesmero
surfactant (1000 ml/ha)
post-emergence at
20 DAS





Considerations in the Herbicide Strategy

Which mitigation measures can be readily implemented by growers?

- Which mitigation measures are most effective and in which situations can they be applied?
- What best management practices resource materials are commonly used by growers or readily available for different mitigation measures?
- What is the prevalence on the use of different mitigation measures for different crops and regions?
- How will criteria for mitigations needed differ for different crops and regions?



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Examples of Mitigations to Reduce Runoff and Erosion

Adjacent to the field mitigations

- Vegetative filter strip
- Riparian buffer strip

On-field Mitigation

- Cover crop
- No or reduced tillage, residue tillage management, strip tillage
- Mulching or compost addition
- Contour farming
- Terrace farming/field terracing
- Strip or alley cropping

Controlled Drainage

- Grassed waterways
- Retention pond/Constructed wetland

Example Mitigations to Reduce Spray Drift

- Buffer distance between the application and sensitive area
- Coarser droplet size
- Lower release height
- Hooded sprayers
- Windbreak/hedgerow
- Others





Herbicide Strategy Timeline

Development
Spring 2023

Release for
Public Comment
July 2023

Consideration of
Comments
Fall 2023

Final Strategy
Released
Spring 2024



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Regional Strategies: Hawaii

Hawaii Strategy

- ▶ The goal is to develop approach to address ESA for Hawaii listed species
- ▶ Timeline
 - ▶ Development Spring/Summer 2023
 - ▶ Workshop: Targeting Fall 2023
- ▶ One way is by grouping the species and critical habitat into bins based on the type of pesticide exposure
 - ▶ Where aerial drift may occur following pesticide applications
 - ▶ Areas that receive pesticide surface water run-off
 - ▶ Agricultural land
 - ▶ Non-agricultural uses such as golf course
 - ▶ Highly remote areas

New AI Guidance to Registrants

- ▶ New conventional pesticides and biopesticides that are intended for outdoor use; and
- ▶ Existing conventional pesticides and biopesticides that are intended for outdoor use that are being reevaluated under registration review
- ▶ Does not create new requirements for applicants but rather to provide guidance on ways applicant can assist EPA in improving efficiency of registrations
- ▶ Activities applicants can elect to perform to inform mitigations:
 - ▶ Identify action area - careful review of intended use sites
 - ▶ Identify exposure routes
 - ▶ Perform initial spatial overlap
 - ▶ Identify mitigation measures
- ▶ Comment period closed June 16th

Pesticide Groups: Rodenticides

- ▶ EPA intends to conduct its ESA analyses (biological evaluations) for *all* listed species and their designated critical habitats on *all* 11 rodenticides as a group
 - ▶ Where appropriate, EPA will similarly initiate consultation with the appropriate Service
- ▶ Ensures consistent evaluation and mitigation across rodenticides
- ▶ Increases efficiencies by eliminating the need to produce 11 biological evaluations and consult (if necessary) on all 11 rodenticides individually
- ▶ Draft Biological Evaluation due Nov. 2023

Thanks for Listening. Questions?