

EPA – Endangered Species Workplan Update

This is a game-changer

EPA and the Endangered Species Act (ESA)

Federal Endangered Species Act - 16 U.S.C. §1531 et seq. (enacted in 1973)

- As a Federal Agency - EPA must:
 - Ensure that actions it authorizes, funds, or carries out –
 - do not jeopardize the continued existence of any listed species
 - result in the destruction or adverse modification of designated critical habitat of such species.
- ESA prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife.
- EPA must consult with the U.S. Fish and Wildlife Service (FWS) and/or the NOAA Fisheries Service (NMFS) on actions that could affect listed species

- Registration of a pesticide is an “agency action”
- Subject to the provisions of ESA
- Therefore – registration cannot result in “jeopardy” or “adverse habitat modification” - JAM

- Practice was to consult with USFWS and NMFS on each pesticide active ingredient and each listed species
- Resulted in a Biological Opinion from the Services
- Resulted in geographically specific restrictions for certain practices for certain species
- Implemented through County Bulletins – now Bulletins Live Two (BLT)

- Process was time consuming – 4 to 15 years to complete
- Impacts on pesticide users limited to specific areas for specific species
- EPA has completed <5% of consultations needed
- Over 20 lawsuits for failure to complete process
- Generally were ordered by courts to implement ESA provisions
- Courts could order restrictions on pesticide use
- Resulted in uncertainty for pesticide users and crop producers

- New strategy adopted in 2022:
 - Meet ESA obligations when registering new conventional pesticides
 - Incorporate mitigation measures before consultations have been completed or even begun
 - Evaluate types of pesticides as a group (e.g. herbicides, insecticides, rodenticides) relative to JAM considerations
 - Apply protections over broader areas and crop types as a preventive measure
 - Apply mitigation measures to types of pesticides, not just specific active ingredients

EPA is committed to this approach and making rapid progress.

Take home message: this is happening, now.

Selected Milestones

- **April 2022** – Balancing Wildlife Protection and Responsible Pesticide Use – How EPA’s Pesticide Program will meet its ESA Obligations (Workplan)
 - **November 2022** – ESA Workplan Update
 - **June 2023** – Draft Technical Document for support of Interim Ecological Measures
 - **June 2023** – **Vulnerable Species Pilot Project**
 - **July 2023** – Herbicide Strategy
- Still to come:
Insecticide Strategy - Rodenticide Strategy

Comment Opportunities

- Public comment periods of 45-60 days
- No extensions so far
- These proposal are detailed and extensively documented
- EPA is meeting with industry and SLA groups outside of public comment period to get input
- **Still open to suggestions and ideas**

<https://www.epa.gov/endangered-species/epas-workplan-and-progress-toward-better-protections-endangered-species>

Selected Milestones

- **April 2022 – Balancing Wildlife Protection and Responsible Pesticide Use – How EPA’s Pesticide Program will meet its ESA Obligations**
- Describes EPA’s approach – the “Workplan”

- **November 2022 – ESA Workplan Update**
- Describes efforts to reduce pesticide exposure to non-target organisms as part of FIFRA registration actions
- Includes menu of “Interim Ecological Mitigations” that can be included as directions for use on pesticide labels

November 2022 – ESA Workplan Update

- Includes FIFRA Interim Ecological Mitigation (IEM) measures intended to reduce risk to non-target organism
- Will be included in registration decisions, even before re-registration is completed (Interim Decisions)
- Intended for **Agricultural crops uses**
- Implemented on labels (not in Bulletins)

Represents a major change in the way ecological risks are managed

Will require certain land use practices in order to use a labeled pesticide

Soil and water conservation practices that were voluntary
will be required to meet conditions of use on label.

Example IEMs:

In order to mitigate exposure from surface water run-off or soil erosion:

- Pesticide use directions will require one or more of the following in order to comply with label directions for use:
 - Vegetative filter strip (minimum width 30 ft for surface water runoff, 20 ft for soil erosion)
 - Field border
 - Field terracing/ contour buffer strips
 - Contour farming
 - Cover cropping
 - No/reduce tillage
 - Grassed waterways
 - Riparian buffer zone/ riparian herbaceous zone
 - Vegetative/grassed ditch banks
 - Runoff retention pond/ water and sediment control basin/ sediment catchment basin/ constructed wetland
 - Strip cropping
 - Vegetative barriers
 - Mulching with natural materials
 - Alley cropping

Including these conditions raises many questions:

- Definition of the terms (example: grassed waterways)
- Education and training of applicators
- Enforcement of application instructions
- Documentation of compliance with label instructions
- Applicability of data showing reduced risk from certain products or certain use rates
- Involvement of CCAs, NRCS, SCDs – some agreements are currently confidential

Labels will also reference Bulletins Live Two (BLT)

<https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins>

Example Label Language:

*When using this product, you must follow the measures, including any timing restrictions, contained in the Endangered Species Protection Bulletin for the area where you are applying the product. Before using this product, you must obtain a Bulletin at any time **within six months of the day of application**. To obtain Bulletins, consult <http://www.epa.gov/espp>. For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.*



Application Month: March 2023
Product: INTREPID 80WSP AGRICULTURAL INSECTICIDE (62719-438)

- 1 Areas where pesticide use must be limited are identified on the map. A legend is located beside the map to help pinpoint these locations.

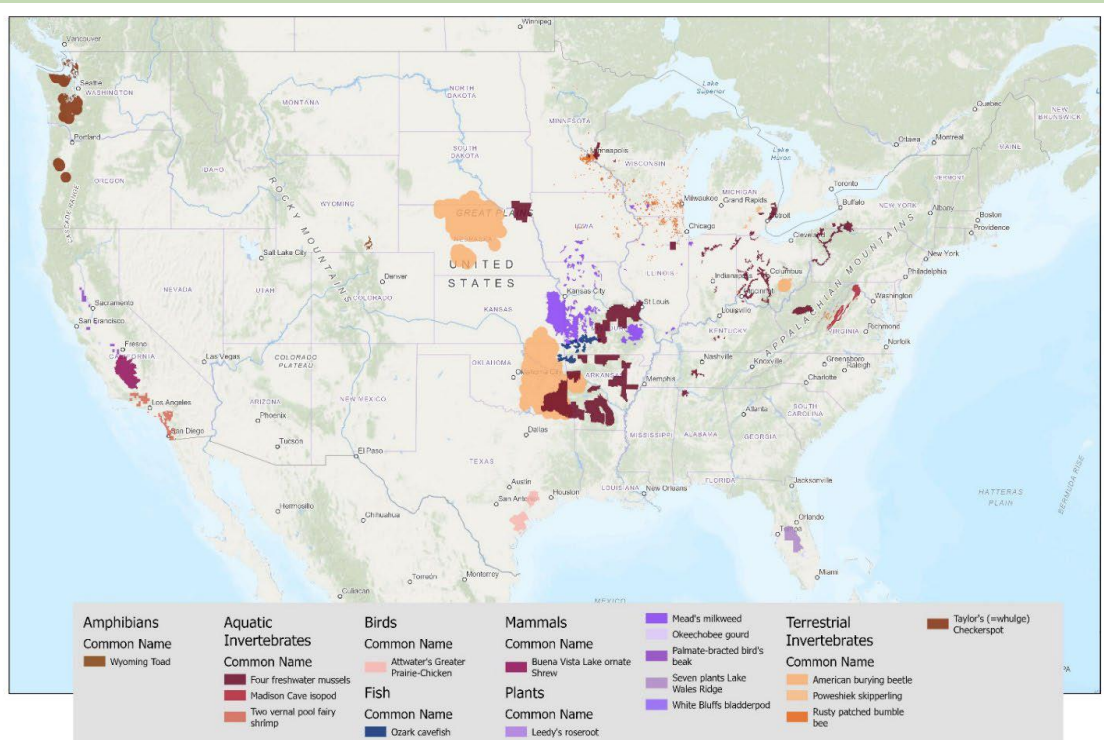


- 2 Look below at the Pesticide Use Limitation Summary Table. This table lists the user selected Active Ingredient(s) (ALs) or Product(s) with pesticide use limitations on the printed map. Locate the Active Ingredient (AI) or Product you intend to apply in this table and identify the code in the last column. This code indicates the specific limitation associated with that AI or Product. A limitation description for each code can be found below in the Codes and Limitations Table. If multiple Pesticide Use Limitation Areas (PULAs) are visible on the map, these tables provide information for the highlighted PULA.

If you are applying a pesticide that contains more than one Active Ingredient, or multiple Products, then multiple codes may apply. Follow the limitations for all codes when using this pesticide.

June 2023 – Vulnerable Species Pilot Project

- Applies to 27 listed species that EPA has determined are particularly vulnerable to potential pesticide effects
- May be expanded at a later date



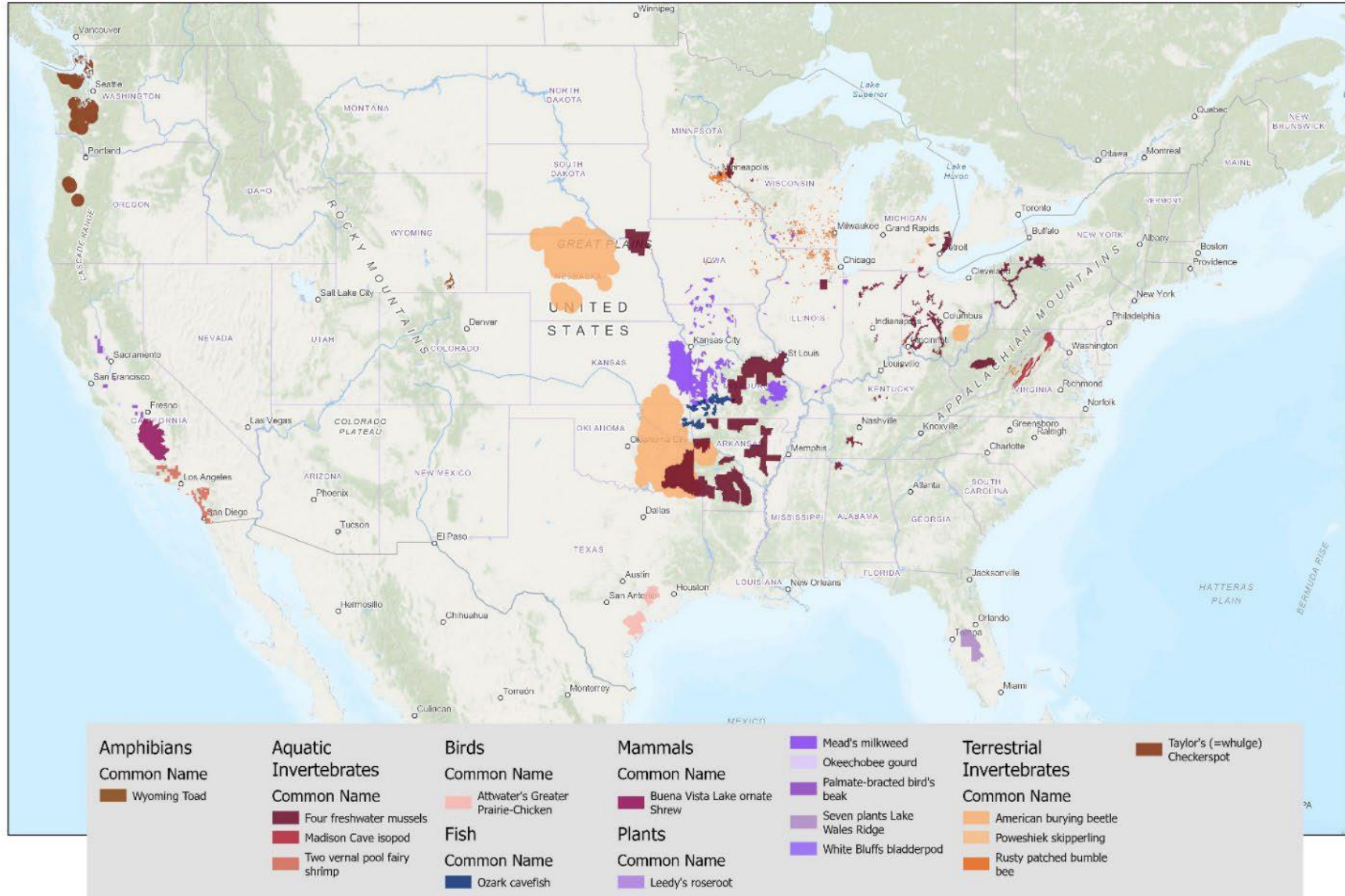
Pilot Species

EPA identified the pilot species listed below using documentation from the Services (e.g., 5-year reviews, biological opinions) and spatial data for ranges. These data are on the FWS webpages accessible by clicking the species links. For the species that EPA identified for this pilot, FWS concluded that they have high or medium vulnerability to all relevant stressors and indicated that pesticides may be a potential stressor for the species. FWS also indicated 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. Therefore, protections for these species would benefit other listed species.

The initial set of priority species includes:

- Group of plant species in Lake Wales Ridge area of Florida (including [Avon park harebells](#) (*Crotalaria avonensis*), [Garrett's mint](#) (*Dicerandra christmanii*), [wireweed](#) (*Polygonella basiramea*), [scrub blazingstar](#) (*Liatris ohlingerae*), [short-leaved rosemary](#) (*Conradina brevifolia*), [scrub mint](#) (*Dicerandra frutescens*), [Florida ziziphus](#) (*Ziziphus celata*), and several other species that occur in this area)
- [Leedy's roseroot](#) (*Rhodiola integrifolia* ssp. *leedyi*)
- [Mead's milkweed](#) (*Asclepias meadii*)
- [Okeechobee gourd](#) (*Cucurbita okeechobeensis* ssp. *okeechobeensis*)
- [Palmate-bracted bird's beak](#) (*Cordylanthus palmatus*)
- [White bluffs bladderpod](#) (*Physaria douglasii* ssp. *tuplashensis*)
- [Madison cave isopod](#) (*Antrolana lira*)
- [Ouachita rock pocketbook](#) (*Arkansia wheeleri*)
- [Rayed bean](#) (*Villosa fabalis*; freshwater mussel)
- [Scaleshell mussel](#) (*Leptodea leptodon*)
- [Winged mapleleaf](#) (*Quadrula fragosa*)
- [Riverside fairy shrimp](#) (*Streptocephalus woottoni*) and [San diego fairy shrimp](#) (*Branchinecta sandiegonensis*)
- [American burying beetle](#) (*Nicrophorus americanus*)
- [Poweshiek skipperling](#) (*Oarisma poweshiek*)
- [Rusty patched bumble bee](#) (*Bombus affinis*)
- [Taylor's checkerspot](#) (*Euphydryas editha taylori*)
- [Ozark cavefish](#) (*Amblyopsis rosae*)
- [Attwater's prairie chicken](#) (*Tympanuchus cupido attwateri*)
- [Buena vista lake ornate shrew](#) (*Sorex ornatus relictus*)
- [Wyoming toad](#) (*Bufo hemiophrys baxteri*)

Geographic Range of Species in VSPP



**To explore the Vermont Agency of Agriculture, Food and Markets, please visit: www.agriculture.vermont.gov

June 2023 – Vulnerable Species Pilot Project

- Proposes pesticide mitigation measures designed to reduce the pilot species' exposures to conventional pesticides from **non-residential outdoor uses** of those pesticides which includes
 - agricultural
 - non-agricultural use sites
 - rights of way,
 - nursery/ornamentals,
 - forestry,
 - industrial,
 - pasture/rangeland,
 - golf courses,
 - athletic fields,
 - aquatic applications,
 - mosquito adulticide and larvicide applications.

Pesticide Use Limitation Areas (PULAs) will be established on a geographic basis.

Pesticide mitigation measures are required in a PULA.

Mitigations focused on avoidance and minimization

**Restrictions on applications are identified in Bulletins Live Two (BLT)
Label language will require that applicators consult BLT before application
and comply with directions on that site.**

- **Avoidance**

- No application in geographic area identified as critical habitat.
- Exception allowed if approved by FWS at least three months prior to application.

- **Minimization**

- Intended to reduce the likelihood of future jeopardy/adverse modification determinations and to minimize potential take.
- Application using one or more mitigation measures identified by EPA.
- Mitigation applies in a protective zone around avoidance area.

Example of Avoidance and Minimization Areas

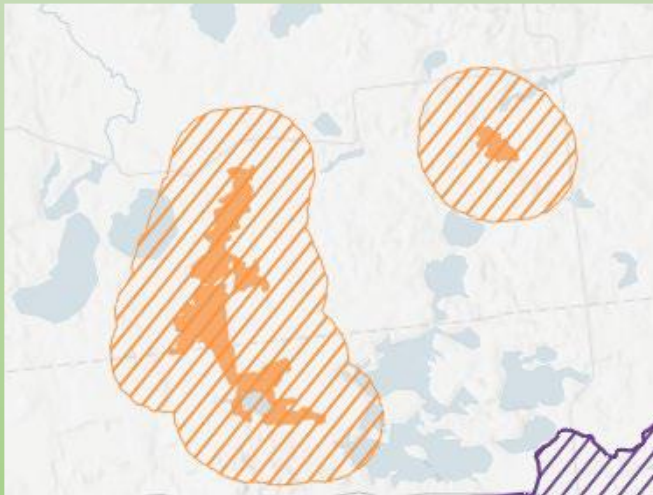


Table 2. Descriptions of Pesticide Use Limitation Areas (PULAs) for Pilot Species.

Species (Common Name)	State(s) Where PULAs are Located	Avoidance PULA Extent	Minimization PULA Extent	Minimization Mitigations	Max PULA Extent (Acres)
Mitigation Area: Delineated location, geographically explicit					
Leedy's roseroot	MN, NY	Part of range (excluding area in South Dakota)	2600 ft extension area around avoidance PULA	Drift, Run-off, Species specific ¹	Less than 50,000
Okeechobee gourd	FL	Range	2600 ft extension area around avoidance PULA	Drift, Run-off, Species specific ¹	Less than 200,000
Poweshiek skipperling	MI, WI, MN	Designated critical habitat	2600 ft extension area around the avoidance PULA	Drift, Run-off	Less than 50,000
Rusty patched bumble bee	IL, IN, IA, ME, MA, MN, OH, VI, WV, WI	Range	2600 ft extension area around the avoidance PULA	Drift, Run-off, Species specific ¹	Greater than 1,000,000
Taylor's checkerspot	OR, WI	Range, which includes designated critical habitat	2600 ft extension area around the avoidance PULA	Drift, Run-off	Greater than 1,000,000
White Bluffs bladderpod	WA	Range, which includes designated critical habitat	2600 ft extension area around the avoidance PULA	Drift, Species specific ¹	Less than 10,000
Mitigation Area: Known habitat, not delineated (see Table 3 for habitat description)					
American burying beetle	AR, KS, MA, NE, OH, OK, RI, SD, TX	Range	Same as avoidance PULA	Drift, Species specific ¹	Greater than 1,000,000
Attwater's prairie chicken	TX	PULA from Malathion BiOp	Same as avoidance PULA	Drift, Run-off	Greater than 1,000,000
Buena Vista Lake ornate shrew	CA	Range, which is inclusive of designated critical habitat	Same as avoidance PULA	Drift, Run-off	Greater than 1,000,000

Minimization measures to be included in PULAs

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
Applications					
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	✓	✓	✓	✓	--
Field Characteristics					
Field with <2% slope	✓	✓	✓	--	✓
Adjacent to the Field or In-between field and Protection Area					
Vegetative Filter Strips ⁷	✓	✓	✓	✓	--
Riparian Area (>10m width from average high-water mark to use site)	✓	✓	✓	✓	--
Controlled Drainage					
Constructed wetlands or Water and Sediment Control Basins	✓	✓	✓	✓	✓

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Bulletin Language for Avoidance Areas:

*Pesticide applications are prohibited within this area unless the applicator coordinates with the local FWS Ecological Services field offices to determine appropriate measures to ensure the proposed application is likely to have no more than minor effects on the species. **The applicator must coordinate with FWS at least 3 months prior to the application.** FWS points of contact are available through the Information, Planning, and Consultation (IPaC) website (<https://ecos.fws.gov/ipac/>). If a permit has been granted by FWS13, no additional coordination with FWS is needed if a pesticide application is made in accordance with an existing FWS permit.*

Bulletin Language for Minimization Areas

- 1. Do not apply when soil in the area to be treated is saturated (if there is standing water on the field or if water can be squeezed from soil).*
- 2. Do not irrigate to the point of runoff. Follow label directions if pesticide needs to be watered into the soil for efficacy.*
- 3. Do not apply if NOAA/National Weather Service predicts 50% chance or greater of 1 or more inches of rainfall to occur within 48 hours following application.*
- 4. Four of the measures in **Table 4** are required to reduce potential transport of pesticides off treated fields from runoff water and soil erosion into the pilot species' habitats. Formal participation in a State or Federal soil and runoff conservation plan satisfies this requirement.*
- 5. The following exemptions to #1-4 apply: a. If the field has subsurface drainage installed, the mitigation measures are not applicable. The subsurface tile drains must release the effluent (water) into water-controlled drainage structures or saturation buffer zones.*
*b. **If the lands are managed with a site-specific runoff and/or erosion plan implemented according to the recommendations of a recognized conservation program,** then no additional runoff/erosion mitigations are needed. Recognized conservation programs include but are not limited to those run by federal and state agencies, a state university extension programs, National Alliance of Independent Crop Consultants, or certified agricultural conservation specialists.*

Implementation

- Will be implemented over the next 18 months
- BLT reference language will be added to pesticide product labeling as part of normal registration and registration review actions
- Registrants can add language requirements through non-notification (not telling EPA that they are doing this)
- EPA will develop Bulletins for the initial set of 27 pilot species

If you are in the room today in a year and a half, then you will be dealing with this (unless you're retired and don't play golf)

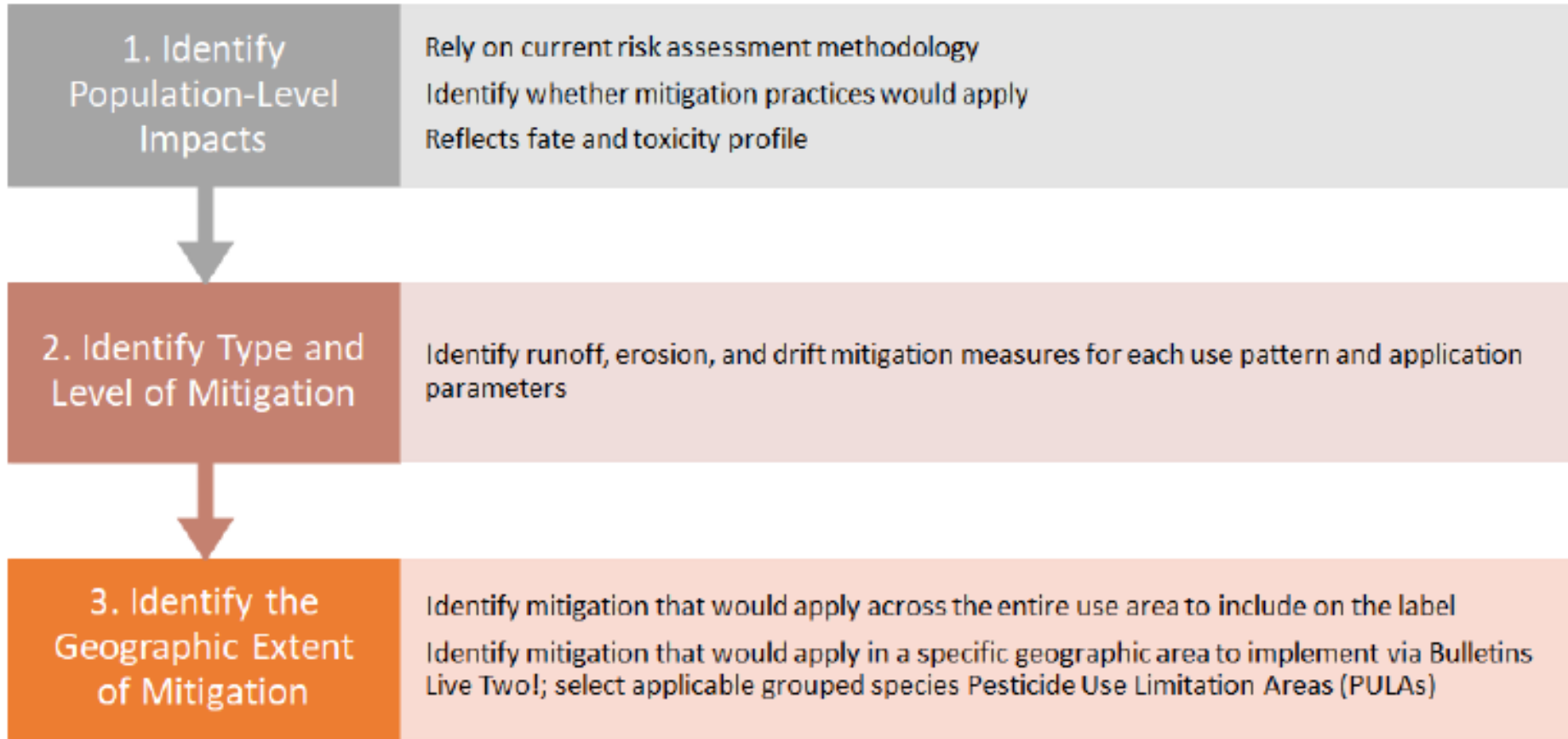


Figure 4-1. Overview of the Draft Herbicide Strategy Process

July 2023 – Herbicide Strategy

Comment Period still open until September 22, 2023

Will result in label directions for mitigations similar to VSPP