



Pesticide Labels and the Endangered Species Act: *ESA 101*

Presentation Overview

What is driving the focus on ESA?

EPA Strategies to address ESA

What you need to know

Retailer resources

The Big Picture

Federal Insecticide Fungicide Rodenticide Act (FIFRA)

Revised in 1972 to emphasize environmental protection and public health

Requires EPA pesticide registrations to be approved if they pose no unreasonable adverse effect on human health or the environment, weighing potential risks and benefits

Endangered Species Act (ESA)

Landmark environmental legislation enacted in 1973

Administered by the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS)

Section 7 requires federal agencies to ensure that their action is not likely to jeopardize threatened or endangered species

EPA obligations under the ESA

Create and implement a process to meet ESA and FIFRA requirements

Determine potential impacts of registration decisions on threatened or endangered species; minimize and mitigate potential impacts

This has been difficult to achieve due to the complexity of the issue and need for EPA, FWS, and NMFS coordination

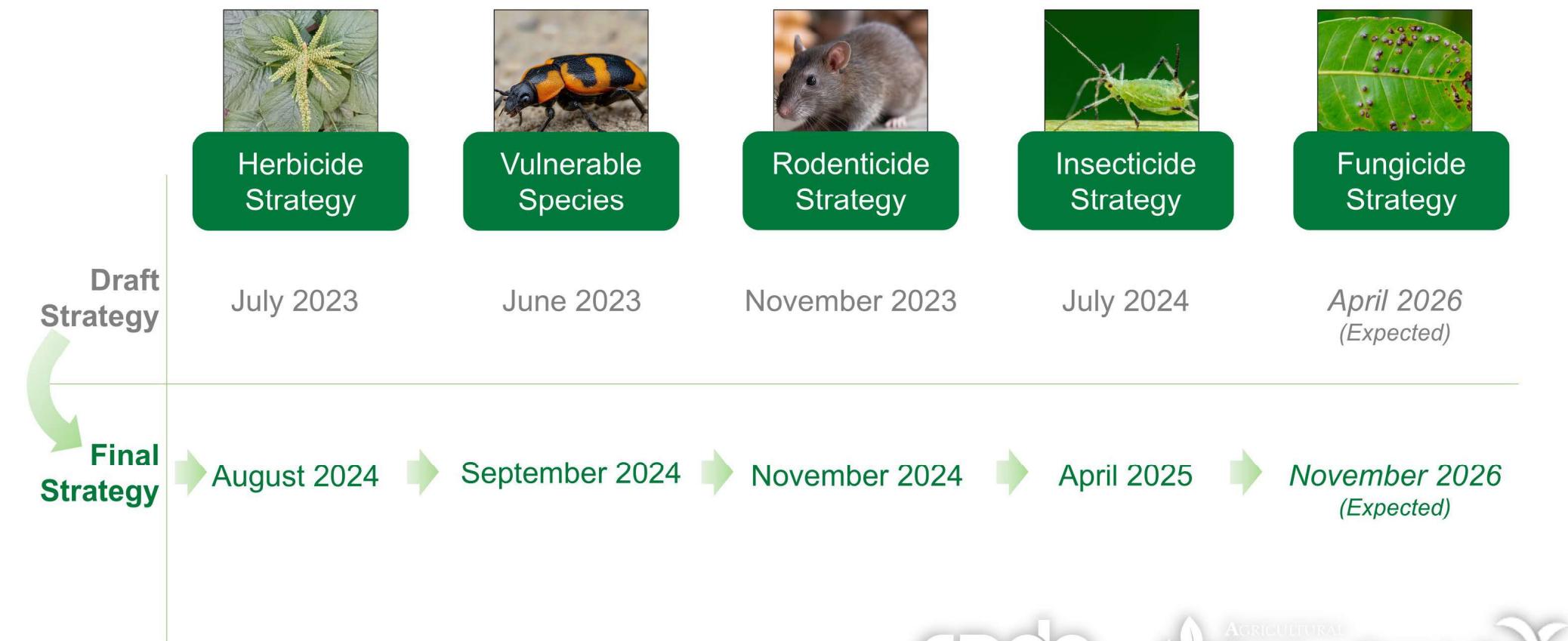
Impact on Product Registrations

Litigation threatened access to pesticides and hampered EPA's ability to conduct timely, consistent, and durable reviews and registrations

Litigation settlement required timelines for implementation of strategies to address ESA



EPA Implementation Timeline for ESA Strategies



Integrating the Strategies with Pesticide Labels

- Starting October 2024, all new product registrations and product registration reviews will include ESA review and may include ESA-specific requirements
 - Mitigations are integrated to both reduce potential non-target effects and fulfill ESA requirements
 - Mitigations should be considered as part of FIFRA-guidance even if they address ESA requirements
- Existing product labels are unaffected until registration review
- Applicators must apply pesticides in accordance with the label of the product they are using. Products that have not yet undergone registration review will not include ESA-required language.



ESA Approaches: What You Need to Know

Specific ESA Additions to Pesticide Labels

Bulletins Live! Two (BLT) & Mitigation Menu

- BLT outlines Pesticide Use Limitation Areas (PULAs)
- PULAs require additional mitigations or restrictions
- Website based Mitigation Menu provides a list of practices to reduce/address mitigation requirements

Runoff/Erosion

- Mitigation points are product-specific
- Mitigation points can be reduced through adoption of EPA-approved conservation practices
- Additional mitigation relief points provided for location and field characteristics

Spray Drift Mitigation Measures

- Buffers are product specific for species protections
- EPA-approved spray drift mitigation adoption can reduce buffer requirements

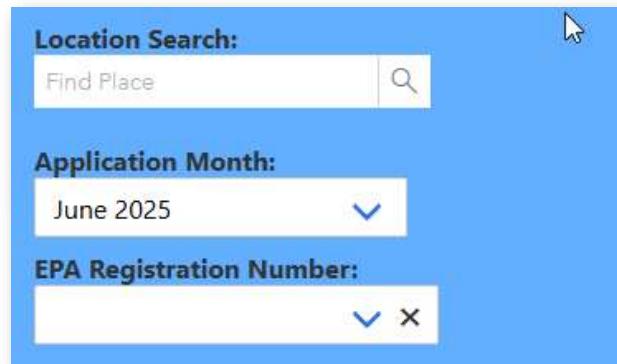


Bulletins Live! Two: What you need to know...

- Some pesticide products have additional mitigation requirements due to proximity to likely species location or critical habitat – these areas are called Pesticide Use Limitation Areas (PULAs)
- PULAs and associated mitigations are accessed through [Bulletins Live! Two](#)
- **Applicator must check for bulletins no more than 6 months before application**



- What you need to use Bulletins Live! Two:
 - Product registration number
 - Month of application
 - Zip code for application location

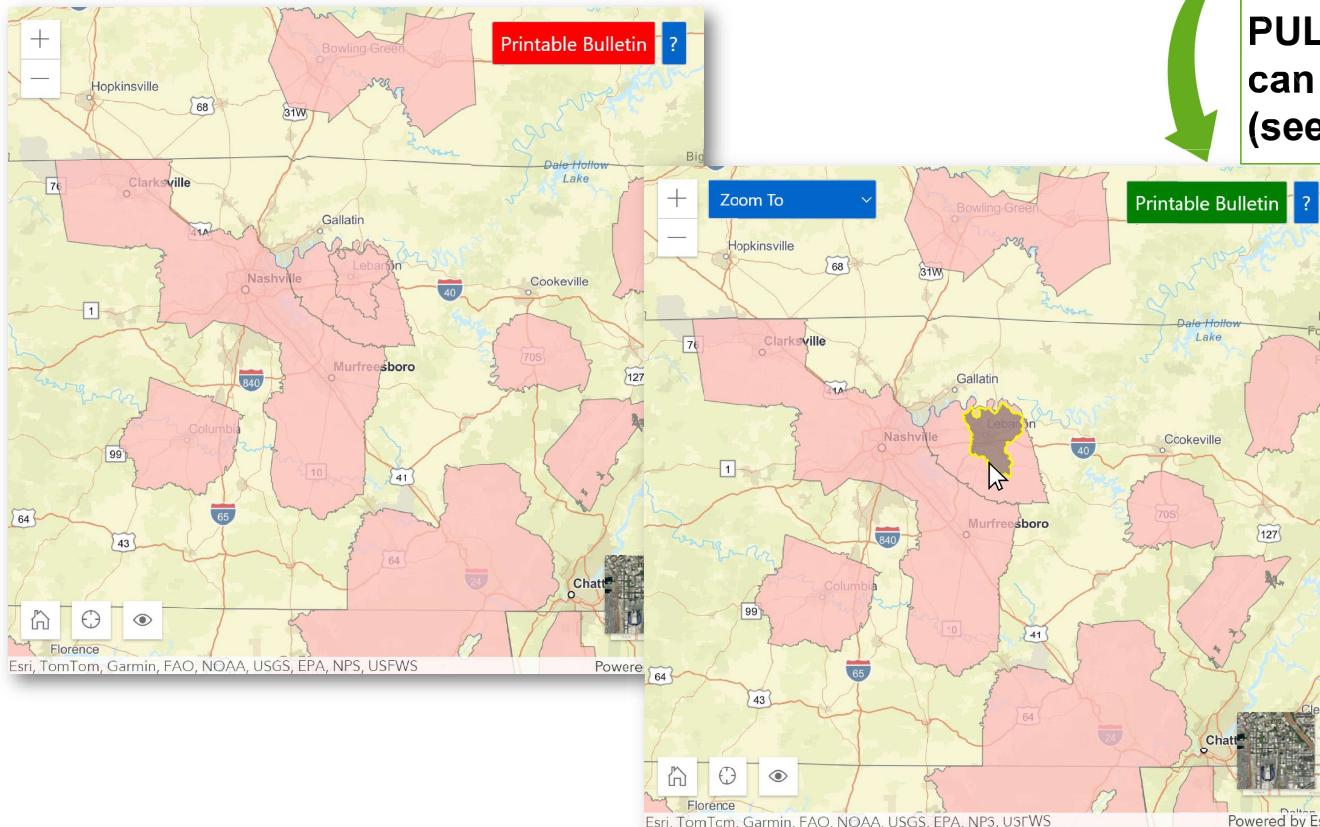


The screenshot shows a search interface with the following fields:

- Location Search:** A text input field labeled "Find Place" with a magnifying glass icon.
- Application Month:** A dropdown menu showing "June 2025".
- EPA Registration Number:** A text input field with a dropdown arrow and an "X" button.



Bulletins Live! Two: What you need to know...



This turns green when a PULA is selected and you can print out the Bulletin (see next slide)



Bulletins Live! Two: What you need to know...

Endangered Species Protection Bulletin

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Application Month: June 2025
Product: BASF L-Glufosinate-Ammonium 211 Herbicide (7969-500)

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.



Legend
■ Limitation Area

2 Look below at the Pesticide Use Limitation Summary Table. This table lists the user selected Active Ingredient(s) (AIs) 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.

- While not a requirement, it is recommended to **save a copy of your Bulletins!**

Endangered Species Protection Bulletin

Pesticide Use Limitation Summary Table

Product	AI	Use	Method	Form	Code	Last Update
BASF L-Glufosinate-Ammonium 211 Herbicide (7969-500)	L glufosinate ammonium	Any Use	All Application Methods	Liquid	E223	1/25/2024

Codes and Limitations Table

Code	Limitation
E223	Do not apply within the use limitation area between September 15 and May 15.

💨 Spray Drift: What you need to know...

- Buffer distances are based on the specific product
- Buffers are found on the label; BLT provides information for additional buffers in PULAs
- **Buffer only applies to downwind side of the field to non-managed areas***
- Buffer distances can be reduced by applying practices from the [Spray Drift Options](#)
- Use the [Spray Drift Calculator](#) to determine final buffer (EPA Pesticide App for Label Mitigation Tool)

Examples of practices from the Spray Drift Options menu for reducing buffer distance

- Drift Reducing Agents
- Pesticide Rate Reductions
- Treated Area Reduction
- Increased Droplet Size
- Lowered Boom Height
- Windbreaks



* Non-managed areas refer to any locations that are not classified as Managed Areas, as defined on the [mitigation menu website](#).



💧 Runoff/Erosion: What you need to know...

- New point system created based on use pattern and field characteristics
- Point levels are based on product characteristics and risk to species:

Potential for Population-Level Impacts	Number of Points from Mitigation Menu	
	Runoff-Prone Chemicals	Erosion-Prone Chemicals
Not Likely	0	0
Low	3	2
Medium	6	4
High	9	6

- **Mitigations only apply to the down-slope edge of the field**
- Relief points are available based on field characteristics, including location, soil type, and participation in a conservation plan
- Mitigation measures to achieve required points and relief points can be found in the [Mitigation Menu](#)
- Use the [erosion/runoff calculator](#) that can assist in finding points available (EPA PALM Tool)



Many practices are **ALREADY COMPLIANT** and do not require the applicator to include additional runoff mitigation (see next slide)

Examples of Mitigation Measures to achieve required points

- Pesticide Rate Reduction
- Treated Area Reduction
- Soil Incorporation
- Conservation Tillage
- Cover Crops
- Irrigation Water Management
- Mulching
- Landscape Improvement
- Water Retention Systems



💧 Practices that already comply with ESA

- Additional runoff/erosion measures for an application do not need to be implemented if the answer is “yes” to any one of the series of questions on EPA’s Mitigation Menu [here](#) – examples:
 - Is the application occurring as a spot treatment (<1,000 square feet being treated), e.g., backpack, handheld, or specialized application equipment?
 - Is the treated farm/field less than 1/10th of an acre?
 - Are the areas within 1,000 ft down-gradient from the treated farm/field comprised entirely of managed areas?
- See the full list [here](#)



Pesticide App for Label Mitigations (PALM)

- EPA developed a single, easy-to-access platform for applicators to review ESA mitigation requirements, calculate Runoff Mitigation Points, and determine Spray Drift Buffers.
- By entering a field location (state, county), users can identify mitigations that apply at their site reducing compliance uncertainty.
- The app translates ESA mitigations into actionable steps, helping applicators choose practices that help protect species while allowing pesticide use.
- PALM can serve as a log of what mitigations were applied, providing applicators with clear documentation for their records.



Home / Pesticides

Pesticides

[Antimicrobial Pesticides](#)
[Biopesticides](#)
[Contact Us](#) [About Pesticides](#)

Pesticide App for Label Mitigations

EPA released the Pesticide App for Label Mitigations (PALM), a mobile-friendly tool to serve as a one-stop shop that helps farmers and applicators use EPA's mitigation menu to reduce pesticide exposure to nontarget species from agricultural crop uses. PALM combines the functionality of the spray drift and runoff calculators in a mobile-friendly and easy-to-use web interface. This application also provides a useful summary to show how users calculated their runoff and erosion mitigation points or ecological spray drift buffer reductions and what field characteristics or application parameters are applicable to their individual applications.

These calculators are tools for informational purposes to assist pesticide users in determining whether the necessary level of mitigation has been met before applying a pesticide product. Pesticide users remain responsible for ensuring that all pesticide labeling requirements are met. Not all labels permit use of runoff/erosion mitigation measures or spray drift reduction.

This tool will not retain any of the information entered here.

[Contact Us](#) to ask about questions related to PALM.

[Runoff/Erosion calculator](#)

[Spray drift calculator](#)

Access PALM [HERE](#)



Summary

 EPA is addressing ESA through new strategies and label changes to provide for consistent, durable pesticide registration reviews

 Check the product label for:

- “Endangered and Threatened Species Protection Requirements” – BLT
- “Runoff/Erosion Management” – Points
- “Spray Drift Management” – Buffers

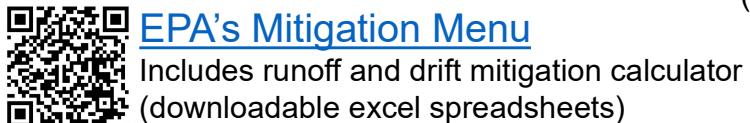
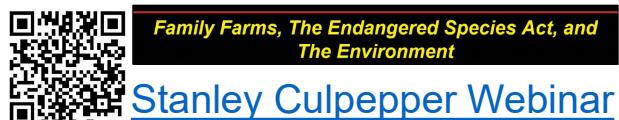
 Use EPA’s spray drift and runoff calculators to obtain buffer reductions and points for runoff mitigations

 Check BLT no more than 6 months before application

 Documentation, such as printouts of bulletins and implemented mitigations, is highly recommended



Resources Available



State Websites Available

(Not a Comprehensive List)

