



**Office of Indiana
State Chemist**



Status of EPA's Endangered Species Act Work Plan for FIFRA

Indiana Pesticide Review Board Meeting

January 17, 2024

-Dave Scott-

Pesticide Administrator

Endangered Species Act Implementation under FIFRA



- Endangered Species Act (ESA)...federal law enacted in 1973
- Designed to protect threatened & endangered species from extinction
 - Impacts EPA's historic risk/benefit calculation
 - Tips more weight to risk (ecological)
- U.S. Fish & Wildlife Service manages:
 - land species &
 - freshwater species
- National Marine Fisheries Service (within NOAA) manages:
 - marine species &
 - anadromous species (migrating from saltwater to freshwater to spawn)

Association of American Pesticide Control Officials

AAPCO ESA Work Group

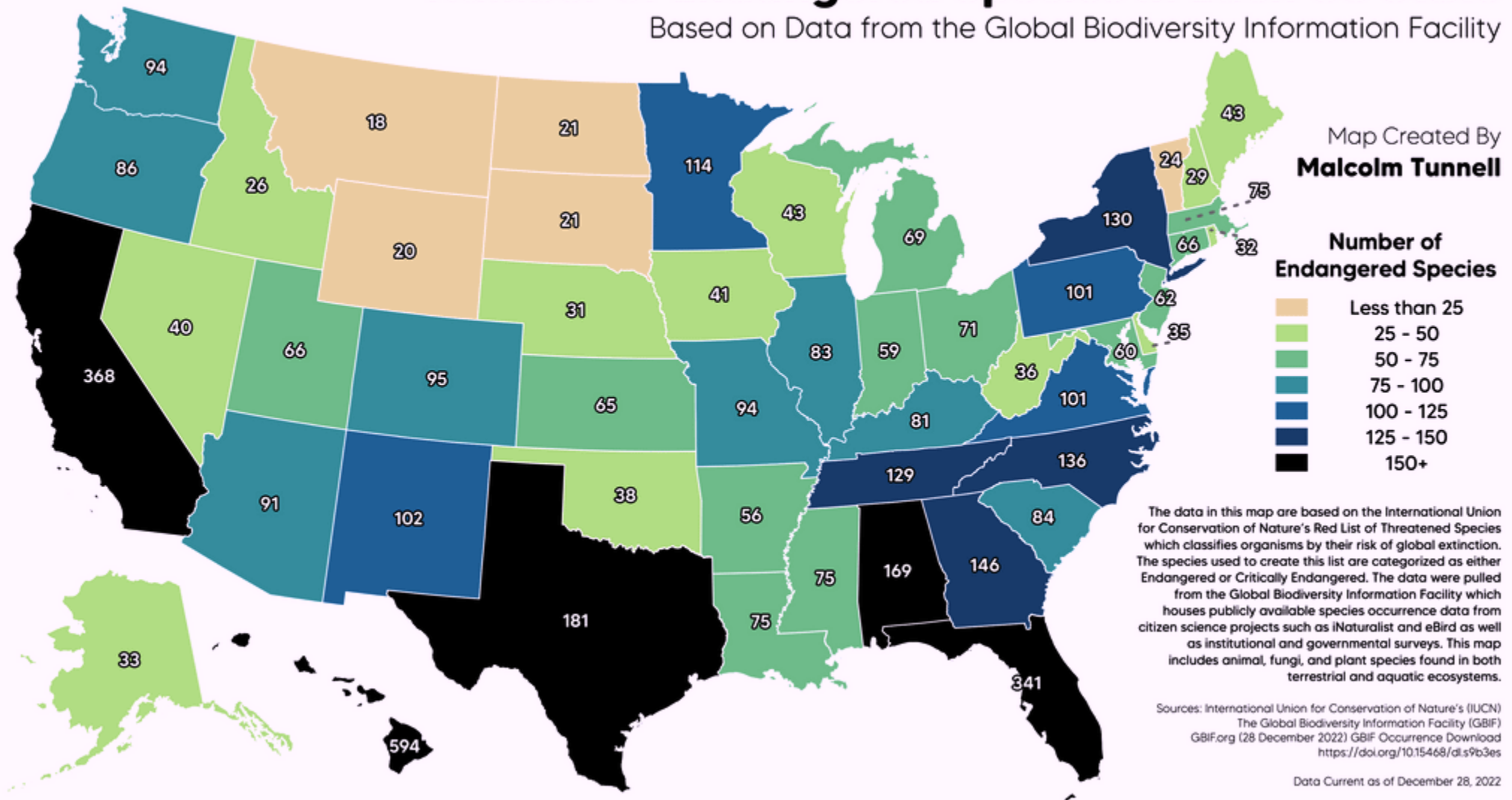
Formulated.... February, 2023

Co-chairs...Gretchen Paluch (IA) & Steve Dwinell (VT)

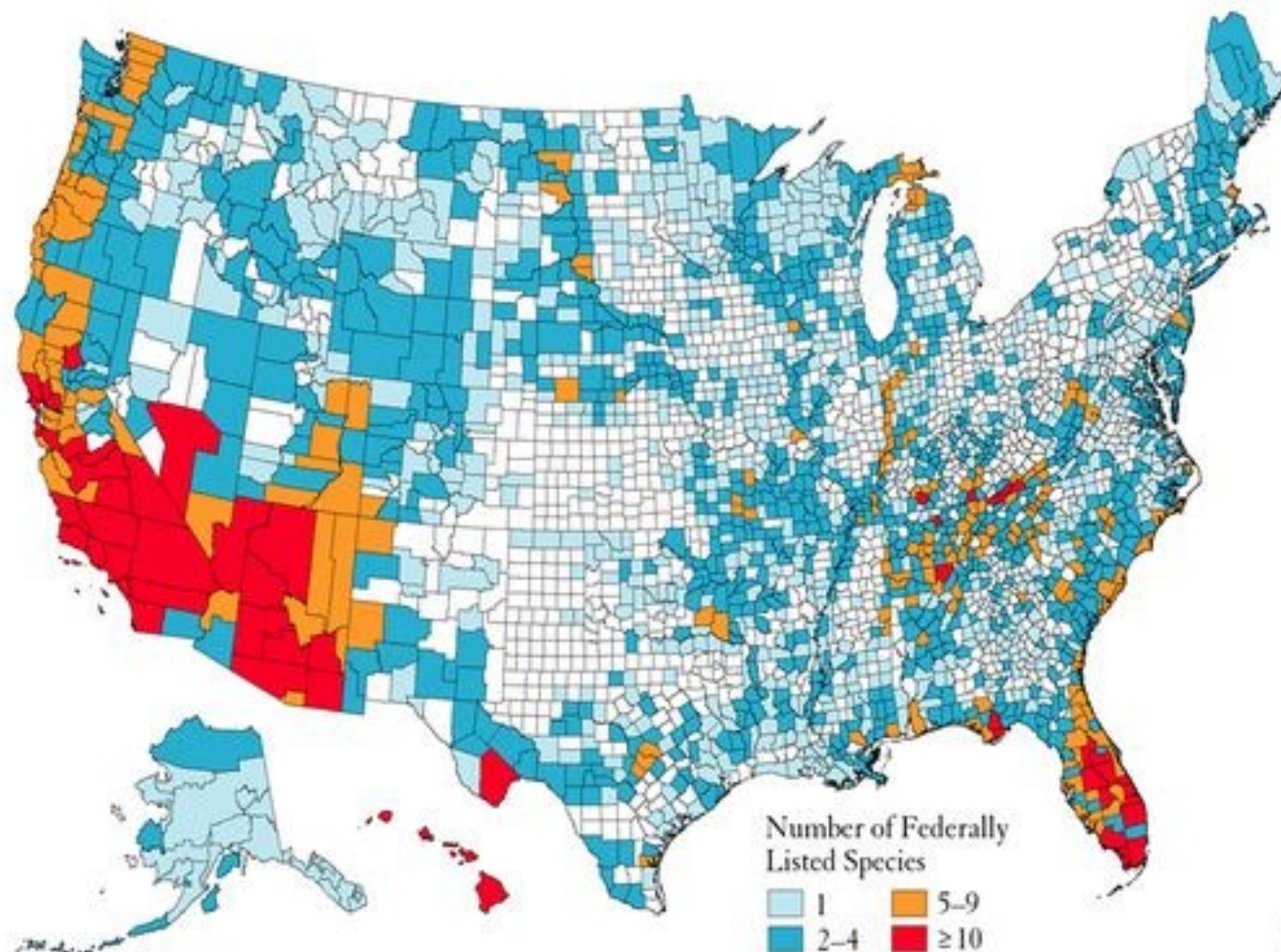
- FL
- NE
- WA
- OR
- ND
- MI
- GA
- KS
- IN

Number of Endangered Species in Each US State

Based on Data from the Global Biodiversity Information Facility



Endangered species clustered in subset of counties

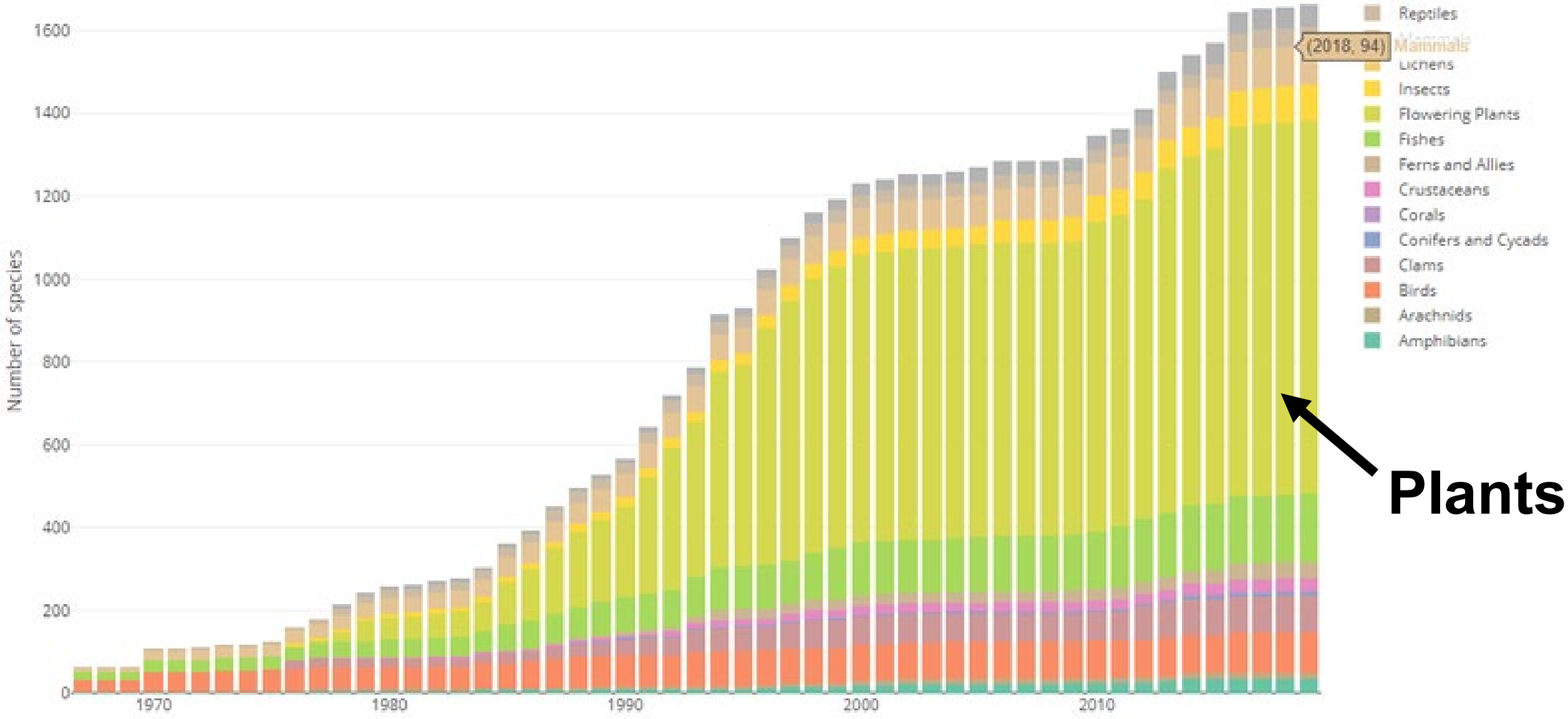


What Do We Think Of When We Hear Endangered Species?

Most of the time we think of bald eagles & polar bears

ESA also include lesser-known species:

- Plants (Mead's Milkweed)
- Insects (Rusty Patched Bumble Bee)
- Reptiles (Eastern Massasauga-Rattlesnake)
- Clams or mussels (Fat Pocketbook)



1662

Number of ESA-Listed Species

388

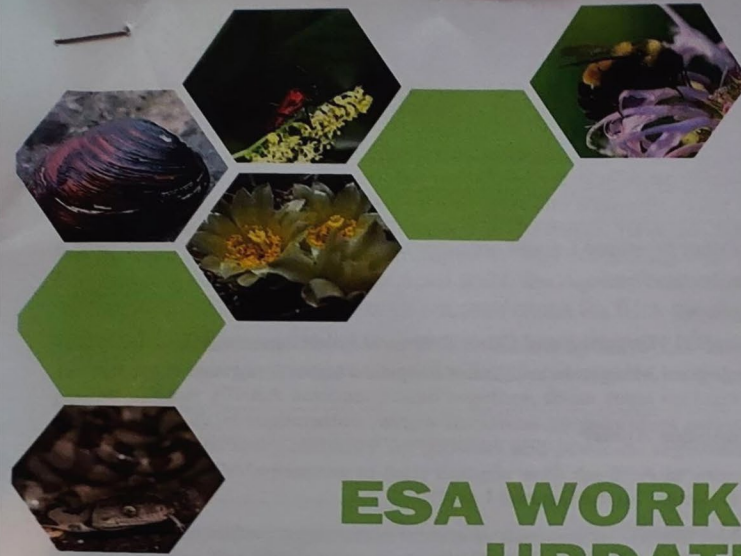
Number of Threatened Species

1274

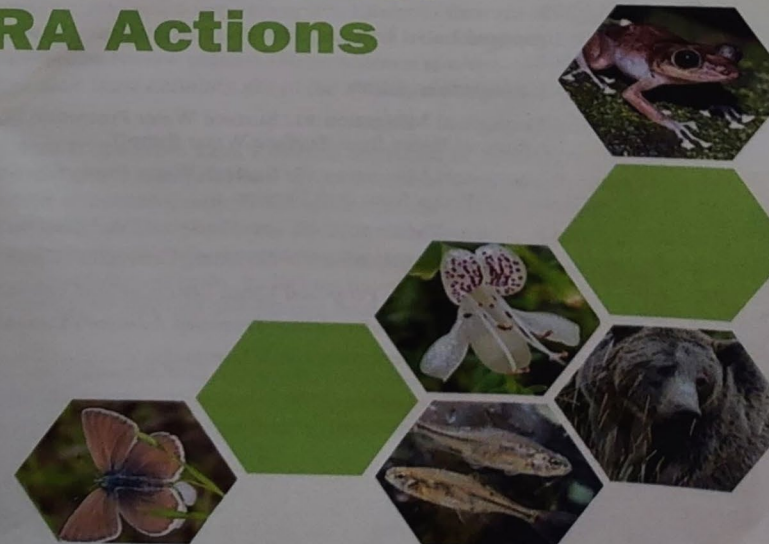
Number of Endangered Species

So, why are we talking about ESA only now?

- Less than 5% of FIFRA registration actions have been ESA compliant.
- Resulting in over 20 lawsuits against EPA, covering over 1000 products
- EPA's ESA priorities now driven by:
 - litigation settlements
 - court imposed deadlines
 - risk of courts vacating registrations & loss of products
 - *(dicamba OTT soybean products 2019, 2,4-D/glyphosate-Enlist 2020)*



**ESA WORKPLAN
UPDATE:
Nontarget Species
Mitigation for Registration
Review and Other
FIFRA Actions**



November 2022

How will EPA implement mitigation measures?

- Bulletins Live! Two (BLT) <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins>
- Web-based application to access ES protection Bulletins .
- Bulletins contain enforceable pesticide use limitations that are necessary for ESA compliance.
- Proposed for all products except:
 - Residential (homeowner) use products; *commercially applied residential products are included in the scope*
 - Products with negligible exposure or no expected toxic effects to ES

ENDANGERED AND THREATENED SPECIES PROTECTION REQUIREMENTS

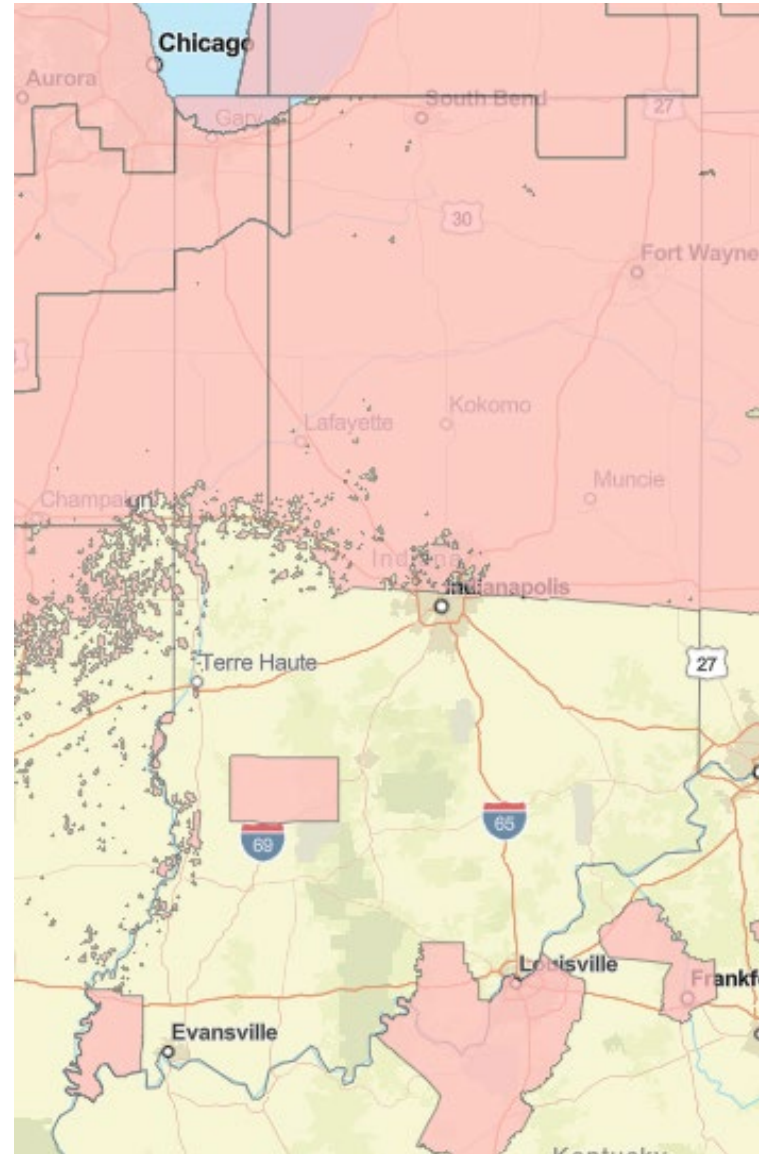
It is a Federal offense to use any pesticide in a manner that results in an unauthorized “take” (e.g., kill or otherwise harm) of an endangered species and certain threatened species, under the Endangered Species Act section 9.

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 the 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 .

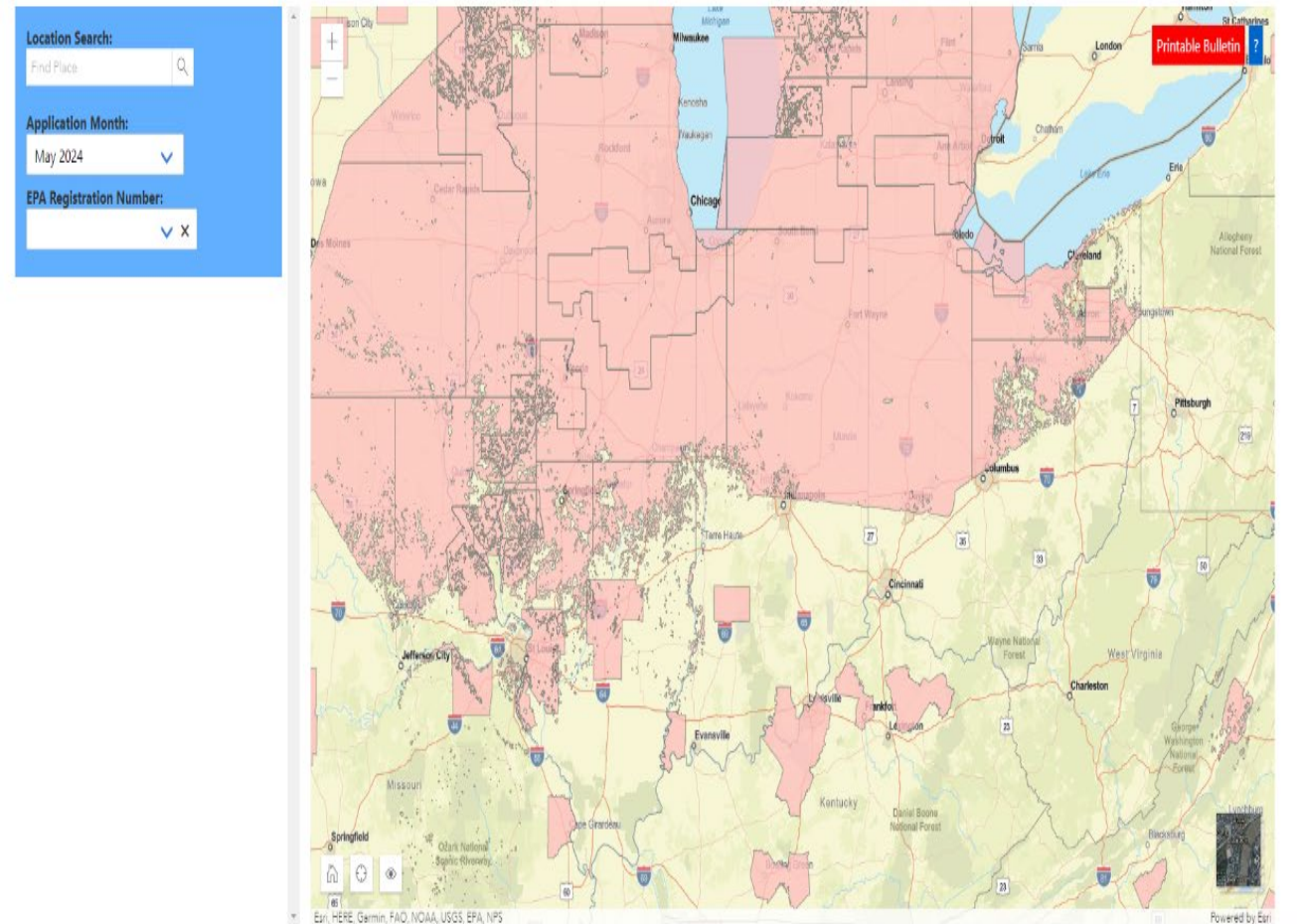
Current IN ESA PULA (Pesticide Use Limitation Area)

- Here's where ESA label statement is relevant.
- So far it highlights 2 active ingredients
 - Dicamba (Ag Drift)
 - Cyantraniliprole



How Does It Work?

Start by entering the EPA reg. # and month of application.



How Does It Work?

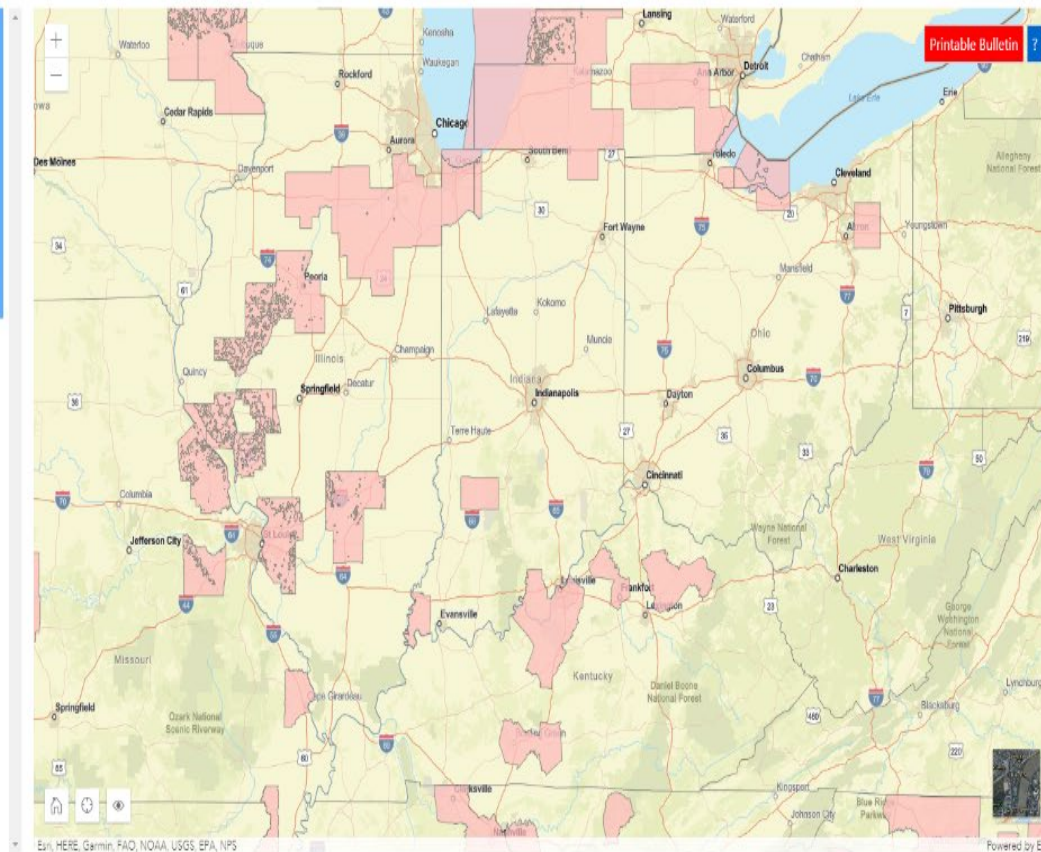
- If application will take place in highlighted area, click on the area.
- Then click the red “Printable Bulletin” in upper right corner

Location Search:
Find Place

Application Month:
May 2024


EPA Registration Number:
7969-472

Product Name:
Engenia Herbicide



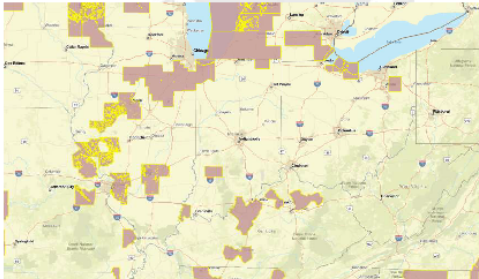
How Does It Work?

Endangered Species Protection Bulletin



Application Month: May 2024
Product: Engenia Herbicide (7969-472)

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.

This document contains legal requirements for the use of certain pesticides. Do not modify any text, graphics or coloration or otherwise alter this document. ESPP Contact: ESPP@epa.gov Phone: 1-844-447-3813

Endangered Species Protection Bulletin

Pesticide Use Limitation Summary Table

Product	AI	Use	Method	Form	Code
ENGENIA HERBICIDE (7969-472)	Dicamba	Dicamba-Tolerant Cotton	Ground spray	Liquid	D120
ENGENIA HERBICIDE (7969-472)	Dicamba	Dicamba-Tolerant Soybean	Ground spray	Liquid	D120

Codes and Limitations Table

Code	Limitation
D120	To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. If applying to dicamba-tolerant soybeans with a qualified hooded sprayer, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see the label for a link to the website(s) with your product's qualified hooded sprayers. The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges: 1. Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field. 2. Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans. 3. Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.

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How Does It Work?

Codes and Limitations Table

Code	Limitation
D120	<p>To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. If applying to dicamba-tolerant soybeans with a qualified hooded sprayer, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see the label for a link to the website(s) with your product's qualified hooded sprayers. The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges: 1. Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field. 2. Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans. 3. Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.</p>

What type of mitigation measures are being proposed?



Surface Water Protection Requirements

Runoff Mitigation

Erosion Mitigation



Spray Drift Management Requirements

Aerial

Airblast

Ground Boom

Buffers to Aquatic Habitats

Buffers to Wildlife Conservation Areas

Vulnerable Species Pilot

- Mitigation measures (applied broadly across different types of pesticides) for species with limited ranges & where pesticides have already been identified as a stressor for the species. ~27 species identified

Rodenticide Strategy

- Address effects to mammals & birds that consume rodenticide bait (1° consumers), & to birds, mammals & reptiles that consume 1° consumers

Rodenticide Biological Evaluation
Brodifacoum, Bromadiolone, Warfarin & Zinc Phosphide

Herbicide Strategy

- Focus on ESA-listed plants & those species that rely on plants
- Address spray drift & runoff transport from treated fields to minimize exposure

Insecticide Strategy

Fungicide Strategy

- Strategy to address vulnerable species that may be affected by fungicides

Organophosphate Biological Evaluation

- BE's: Acephate, Bensulide, Dimethoate, Ethoprop, Naled, Phorate, Phosmet & S,S,S-tributyl phosphorotrithioate
- Nationwide Scale Effects Determination: Dichlorvos (DDVP)
- Other AI's may be added if practicable

Compensatory Mitigation

Public Outreach (Draft White paper & Story Maps) conducted by 6/30/2023

45-day Comment Period for white paper

After outreach, determine if mitigations should be revised or more added by 12/30/2023

Determine how to expand the approach to other vulnerable species by 9/30/2024

Mitigation measures developed for 3 representative species (1 mammal 1° consumer; 1 bird 1° consumer & a 2° consumer), 1 designated habitat & plan to consider expanding mitigations to apply to ~90 other ESA-listed species.

Mitigation measures for the representative species incorporated into Rodenticide PID's. Issued in 11/2022

Draft Rodenticide BE in 11/2023. Will consider the mitigations identified in Rodenticide PID's

Final Rodenticide BE no later than 11/12/2024

Draft BE By 11/12/2023

60-day comment period (With option to extend BE's up to 60 days for good cause)

Final BE By 11/12/2024 (or adjusted accordingly due to possible comment extension)

Draft Strategy 7/24/2023

60-day comment period

Final Strategy + Response to Comments Document By 5/30/2024

After 3/30/24 - Strategy mitigation measures incorporated into PID's issued under EPA registration review program.

Group PID's, instead of chemical-specific, will be issued as appropriate.

60-day comment period for PID's

Draft Strategy By 7/30/2024

60-day comment period

Final Strategy + Response to Comments Document By 1/17/25 – 3/31/25

After 3/31/25, Strategy mitigation measures incorporated into PID's issued under EPA registration review program.

Group PID's, instead of chemical-specific, will be issued as appropriate.

60-day comment period for PID's

Attempt to agree on Completion date no later than 8/31/2024

Track 1 - all 8 AI's

Draft BE By 3/31/2027

Final BE By 9/30/2027

Track 2

Group 1 - 4 of 8 AI's

Group 2 - 4 of 8 AI's

Draft BE

Group 1 By 3/31/2026

Group 2 By 3/31/2027

60-day comment period

Final BE

Group 1 By 9/30/2026

Group 2 By 9/30/2027

Intervenors to organize & fund workshop to explore how offsets may be used to address effects of pesticide registrations. Anticipated to occur within 12 months of agreement date; but no more than 24 months of effective agreement date

Vulnerable Species Pilot Project

- *Vulnerable Listed (Endangered and Threatened) Species Pilot Project: Proposed Mitigations, Implementation Plan and Possible Expansion*
- Draft published...June 22, 2023
- Comments due...August 6, 2023
- 27 species (3 in IN...Rusty patched bumble bee, Mead's milkweed, Rayed bean)
 - Avoidance = no application areas
 - Minimization = mitigation measures required areas
- EPA ESA website
 - <https://www.epa.gov/endangered-species/implementing-epas-workplan-protect-endangered-and-threatened-species-pesticides>
- **Story Maps**
 - <https://storymaps.arcgis.com/collections/896d140363174c9d8ee78e4c471bd7fd>

Does the Vulnerable Species Pilot Include Non-Ag Uses ?

- Yes, non-ag uses were included in scope of draft.
- Homeowner use products were not included in scope.
- But no specific mitigation measures have been proposed in the draft pilot to date that address non-ag use mitigation measures.
- Many commenters have pointed this out to EPA.

Herbicide Strategy Framework Document

- *Draft Herbicide Strategy Framework to Reduce Exposure of Federally Listed Endangered and Threatened Species and Designated Critical Habitats from the Use of Conventional Agricultural Herbicides*
- Draft published...July 20, 2023
- Comments due...September 20,2023...extended to **October 22, 2023**
- 900 listed species & critical habitats
- Early mitigation measures
- Example case studies for some herbicides

Insecticide Strategy

- Target for draft is July 30, 2024.
- Target for final is March 31, 2025.
- Will non-ag uses be included in this draft?

Fungicide Strategy

- Target for draft is August 31, 2024.
- Will non-ag uses be included in this draft?

ESA Summary

- ESA applies if language is on label.
- Bulletins Live! Two is an extension of the label and must be included in application preparation. *“The label is the Law”*
- Not currently on all labels but is moving that direction.



Questions or Comments?

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