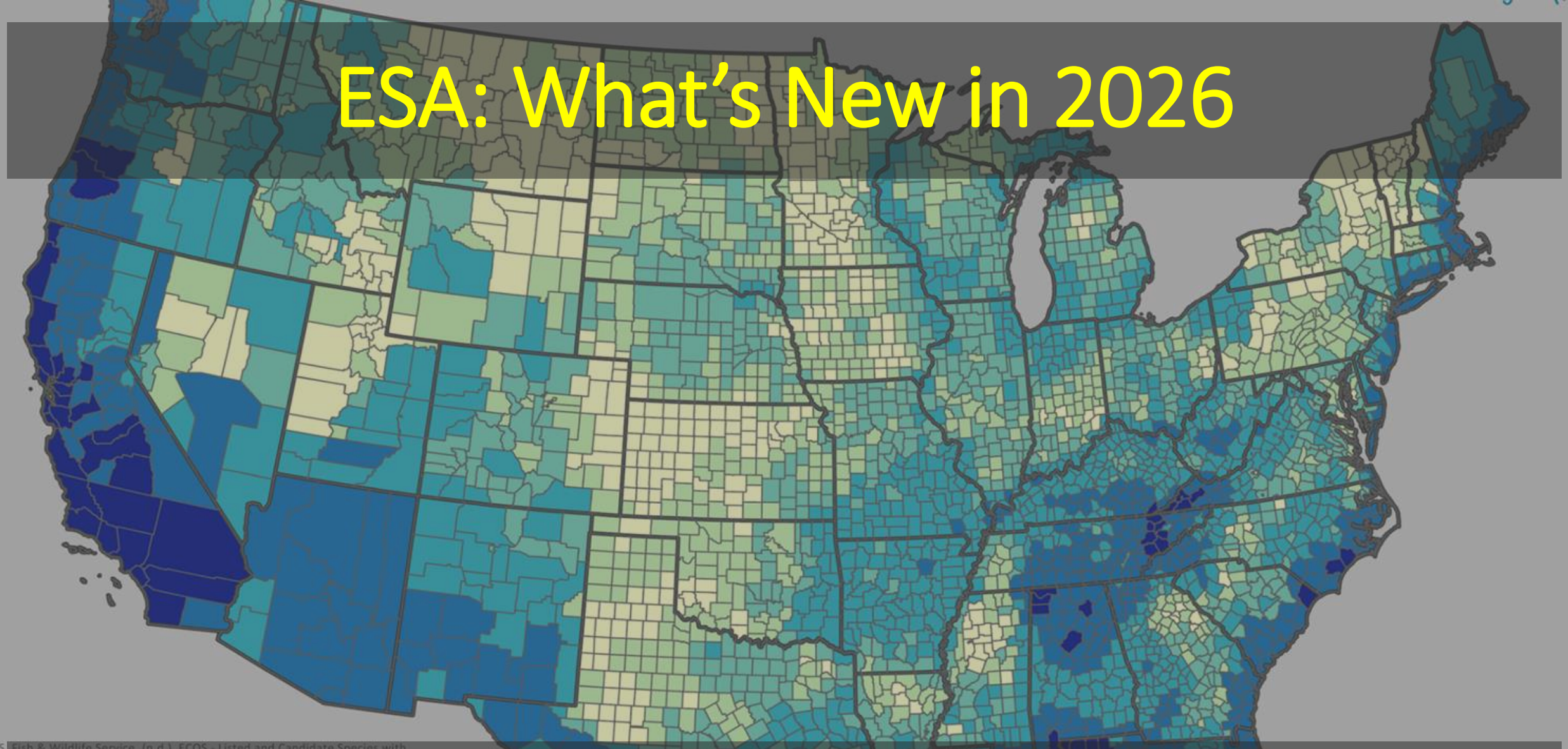
ESA: What's New in 2026



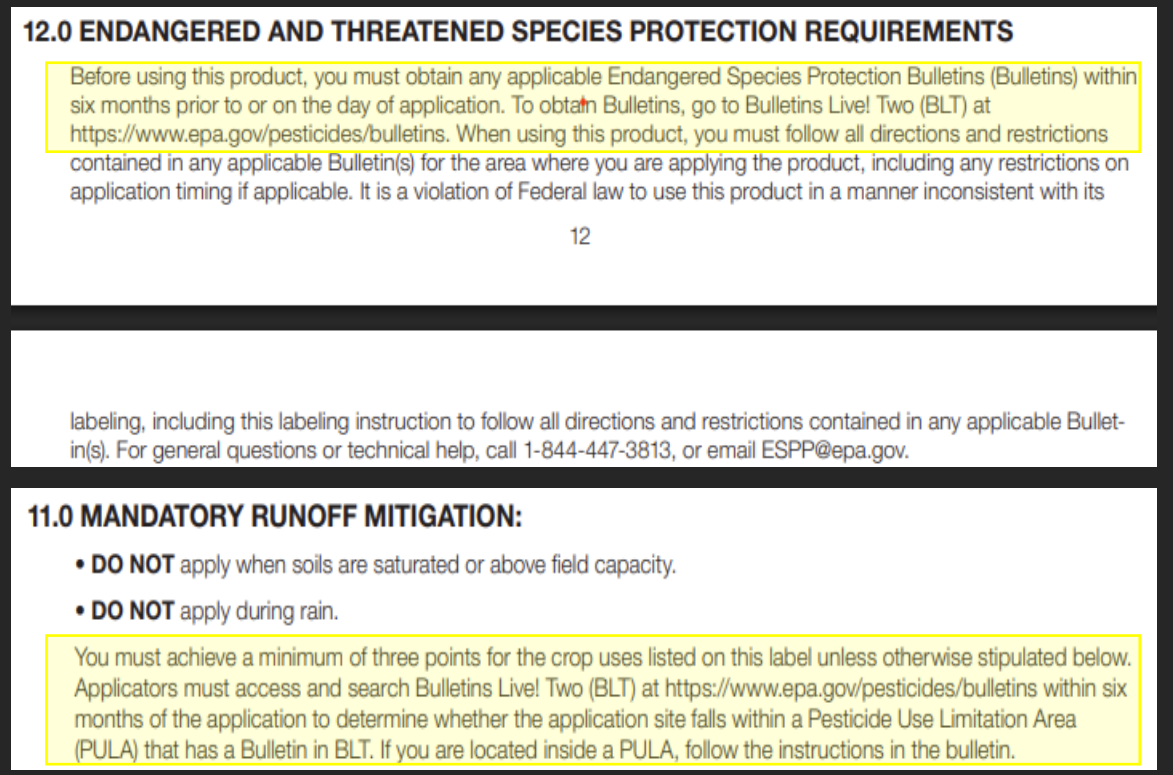
Taylor Randell Singleton – Extension Sustainability Specialist
University of Georgia (Tifton)

Map provided by Compliance Service International (CSI)

New Label Additions

Three New Sections:

1. ***BLT***
   - ***Are you in a PULA?***
2. *Spray drift mitigation*
   - *"Mandatory Spray Drift Buffers"*
3. *Runoff/erosion mitigation*
   - *"Mandatory Runoff Mitigation"*



12.0 ENDANGERED AND THREATENED SPECIES PROTECTION REQUIREMENTS

Before using this product, you must obtain any applicable Endangered Species Protection Bulletins (Bulletins) within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its

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labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s). For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.

11.0 MANDATORY RUNOFF MITIGATION:

- **DO NOT** apply when soils are saturated or above field capacity.
- **DO NOT** apply during rain.

You must achieve a minimum of three points for the crop uses listed on this label unless otherwise stipulated below. Applicators must access and search Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins within six months of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA) that has a Bulletin in BLT. If you are located inside a PULA, follow the instructions in the bulletin.

Bulletins & BLT

- Geographically specific use restrictions to protect listed species = PULAs
- Beyond general label restrictions

BULLETIN

Outlines PULA (*pesticide use limitation area*) where use is limited; defines additional measures applicator must follow

BLT

"Bulletins Live! Two"

Map-based website for locating PULAs and accessing related bulletins for pesticide applications

United States Environmental Protection Agency

Search EPA.gov

Environmental Topics | Laws & Regulations | Report a Violation | About EPA

Home / Endangered Species

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

Bulletins Live! Two -- View the Bulletins

For assistance in using Bulletins Live! Two, view the tutorial. Also see background, notes and a quick start guide for BLT.

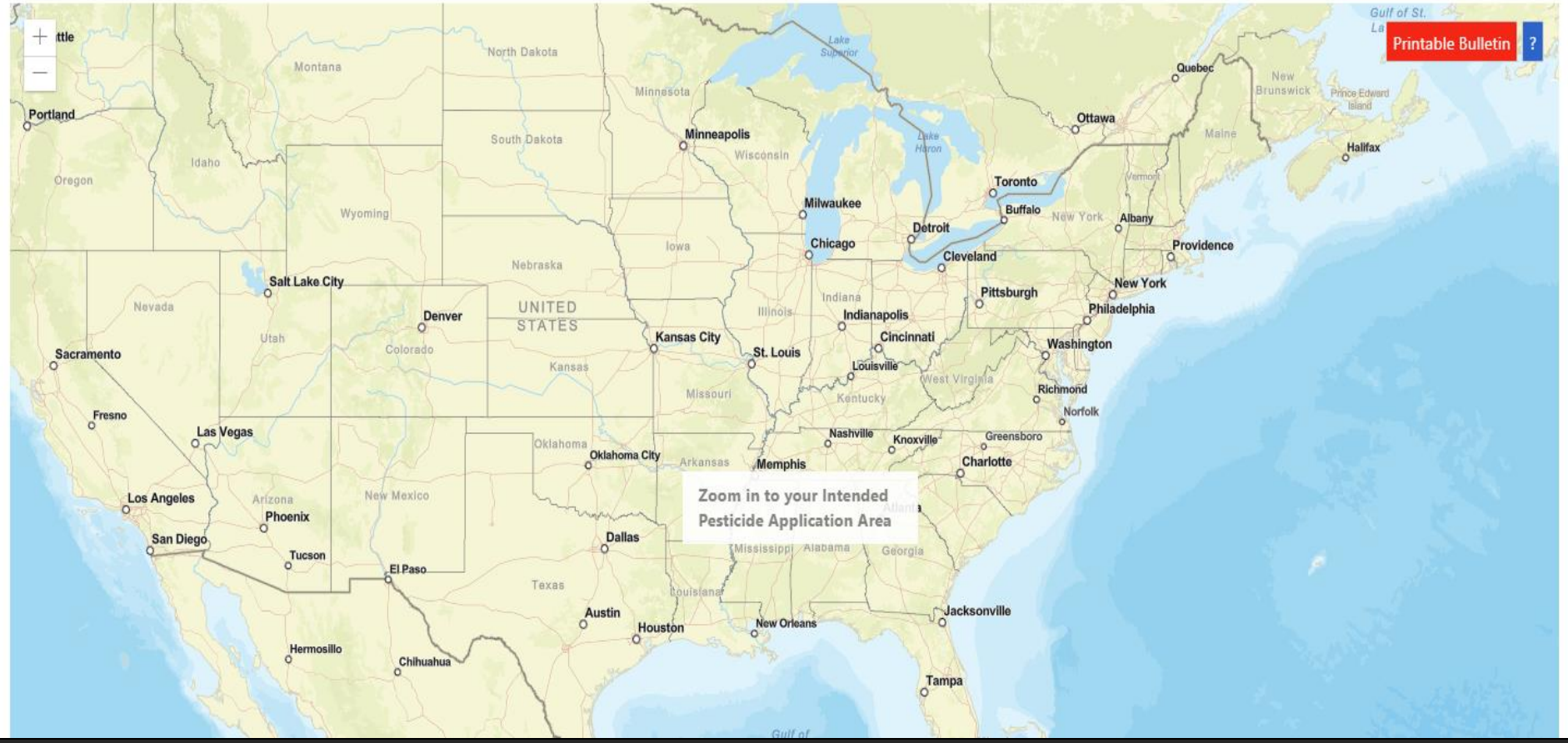
Location Search:

Find Place

Application Month:

September 2025

EPA Registration Number:



Field Crops

Locate Pesticide Use Limitation Areas (PULAs) Using the EPA's Bulletins Live! Two Website

C 1347

Save PDF

UGA Extension contacts:
Taylor Randell Singleton, Stanley Culpepper, and Eric P. Prostko

As pesticides are evaluated for their impacts on threatened and endangered species along with their critical habitats, geographically specific use restrictions are being implemented for some pesticides to ensure the protection of sensitive sites.

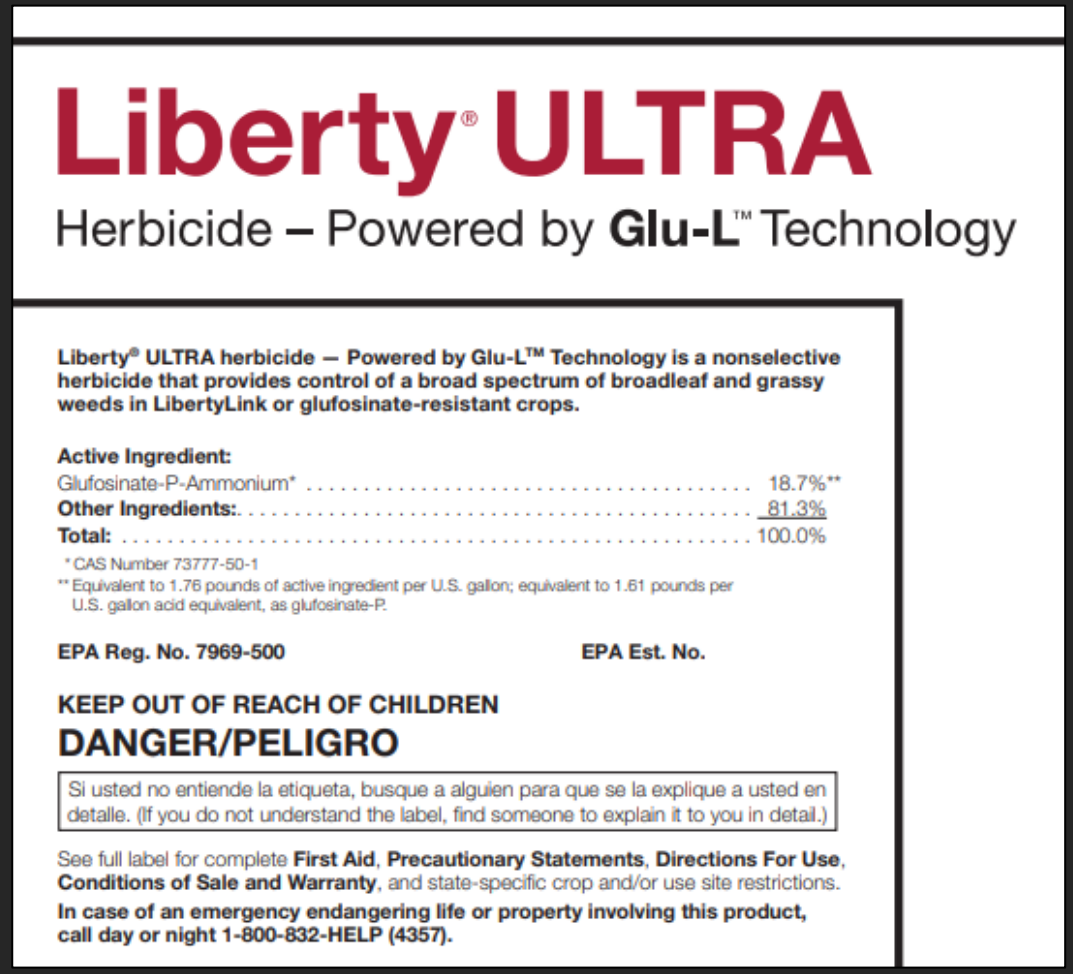
To communicate these restrictions directly with pesticide applicators, the U.S. Environmental Protection Agency (EPA) has created a unique approach called "Bulletins," which identifies the geographically specific pesticide use limitation areas (PULAs), or areas in which specific pesticide use is prohibited or limited under certain conditions (Figure 1).

https://fieldreport.caes.uga.edu/publications/C1347/locate-pesticide-use-limitation-areas-pulas-using-the-epas-bulletins-live-two-website/

New Label Additions

Three New Sections:

1. *BLT*
   - *Are you in a PULA?*
2. ***Spray drift mitigation***
   - **"Mandatory Spray Drift Buffers"**
3. *Runoff/erosion mitigation*
   - *"Mandatory Runoff Mitigation"*



Liberty® ULTRA

Herbicide – Powered by Glu-L™ Technology

Liberty® ULTRA herbicide — Powered by Glu-L™ Technology is a nonselective herbicide that provides control of a broad spectrum of broadleaf and grassy weeds in LibertyLink or glufosinate-resistant crops.

Active Ingredient:

Glufosinate-P-Ammonium* 18.7%**

Other Ingredients: 81.3%

Total: 100.0%

* CAS Number 73777-50-1

** Equivalent to 1.76 pounds of active ingredient per U.S. gallon; equivalent to 1.61 pounds per U.S. gallon acid equivalent, as glufosinate-P.

EPA Reg. No. 7969-500 **EPA Est. No.**

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See full label for complete **First Aid**, **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Spray Drift Mitigation

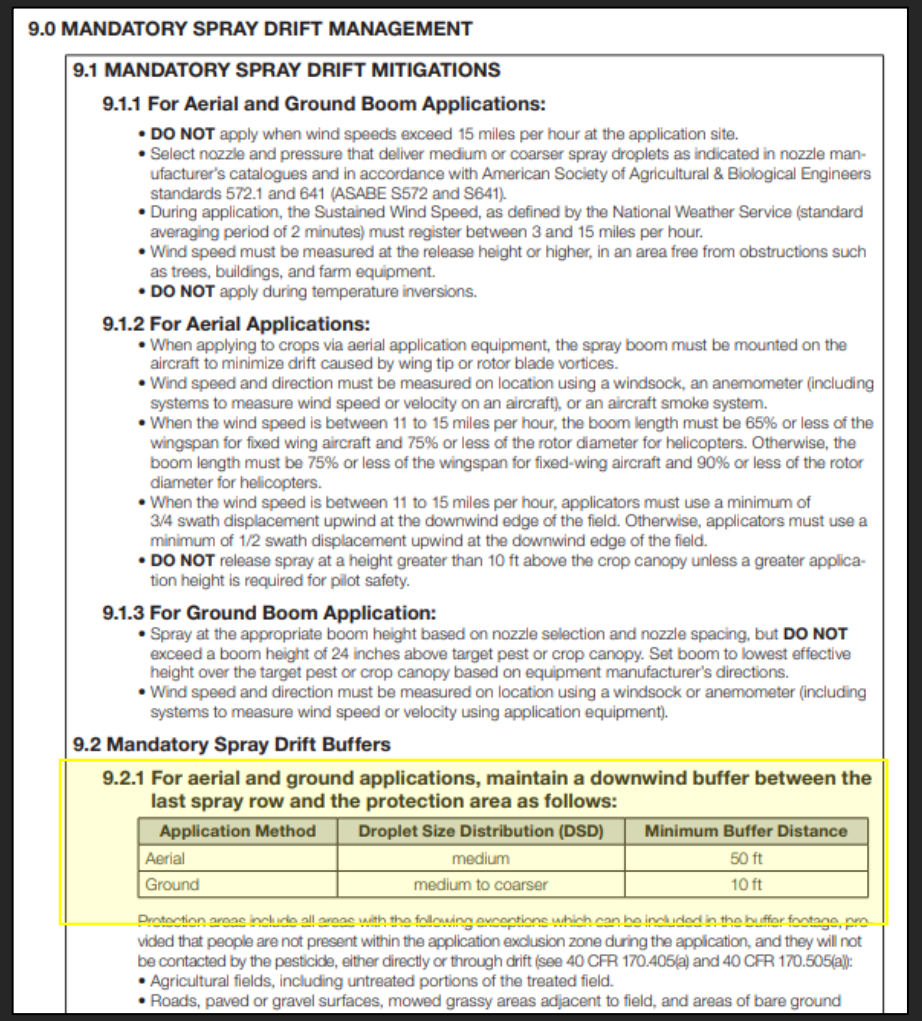
Label will outline what mitigations are necessary:

- *Mitigate spray drift:*
  - Downwind buffers
  - Application method dependent

Ground Applications
(0-230 ft – herbicide)
(0-100 ft – insecticide)

Airblast Applications
(0-160 ft – herbicide)
(0-85 ft – insecticide)

Aerial Applications
(0-320 ft – herbicide)
(0-300 ft – insecticide)



9.0 MANDATORY SPRAY DRIFT MANAGEMENT

9.1 MANDATORY SPRAY DRIFT MITIGATIONS

9.1.1 For Aerial and Ground Boom Applications:

- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- Select nozzle and pressure that deliver medium or coarser spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with American Society of Agricultural & Biological Engineers standards 572.1 and 641 (ASABE S572 and S641).
- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes) must register between 3 and 15 miles per hour.
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- **DO NOT** apply during temperature inversions.

9.1.2 For Aerial Applications:

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft to minimize drift caused by wing tip or rotor blade vortices.
- Wind speed and direction must be measured on location using a windsock, an anemometer (including systems to measure wind speed or velocity on an aircraft), or an aircraft smoke system.
- When the wind speed is between 11 to 15 miles per hour, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- When the wind speed is between 11 to 15 miles per hour, applicators must use a minimum of 3/4 swath displacement upwind at the downwind edge of the field. Otherwise, applicators must use a minimum of 1/2 swath displacement upwind at the downwind edge of the field.
- **DO NOT** release spray at a height greater than 10 ft above the crop canopy unless a greater application height is required for pilot safety.

9.1.3 For Ground Boom Application:

- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions.
- Wind speed and direction must be measured on location using a windsock or anemometer (including systems to measure wind speed or velocity using application equipment).

9.2 Mandatory Spray Drift Buffers

9.2.1 For aerial and ground applications, maintain a downwind buffer between the last spray row and the protection area as follows:

Application Method	Droplet Size Distribution (DSD)	Minimum Buffer Distance
Aerial	medium	50 ft
Ground	medium to coarser	10 ft

Protection areas include all areas with the following exceptions which can be included in the buffer footage, provided that people are not present within the application exclusion zone during the application, and they will not be contacted by the pesticide, either directly or through drift (see 40 CFR 170.405(a) and 40 CFR 170.505(a)):

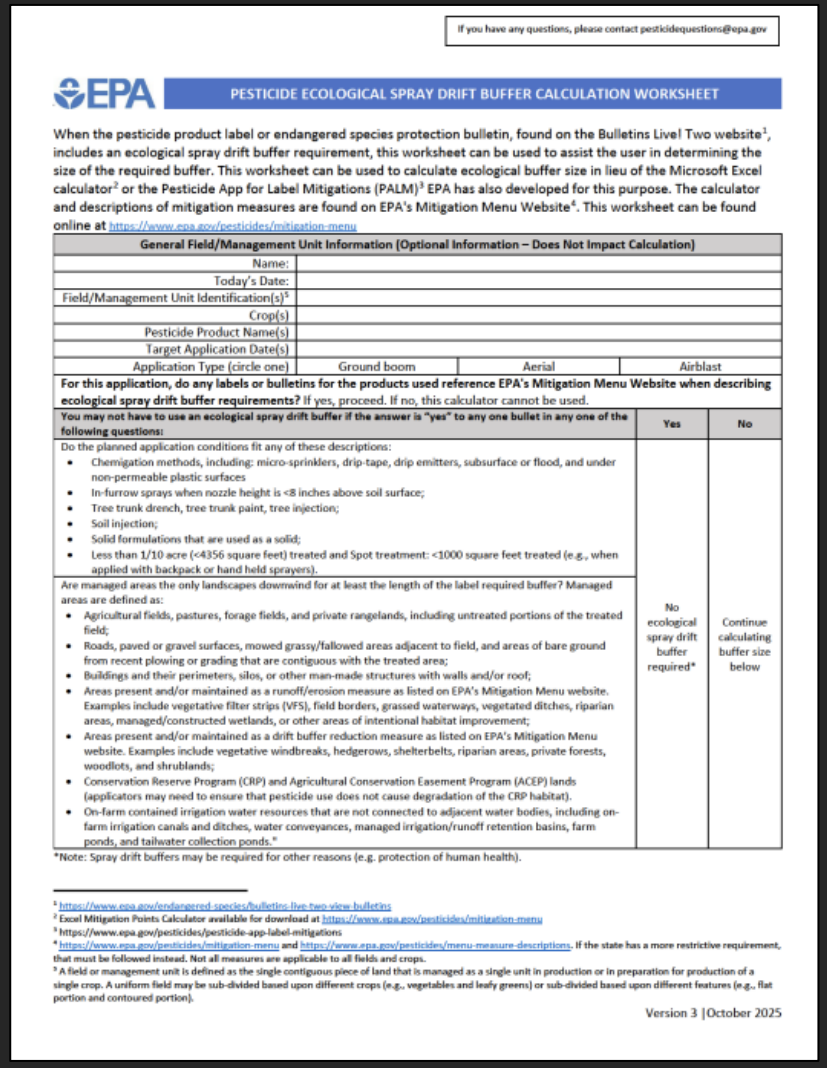
- Agricultural fields, including untreated portions of the treated field.
- Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground

Spray Drift Buffer Mitigation

Options available to reduce buffer distance down (100%)

- How big is the application?
- What kind of application?
- Managed area?
- Application rate reduction
- Droplet size
- Boom height
- Hooded sprayer/layby/drop nozzles
- Adjuvants
- Reduced proportion of field
- Downwind windbreaks/hedgerows/forests/ etc
- Humidity

PDF Worksheet Available



If you have any questions, please contact pesticidequestions@epa.gov

EPA PESTICIDE ECOLOGICAL SPRAY DRIFT BUFFER CALCULATION WORKSHEET

When the pesticide product label or endangered species protection bulletin, found on the Bulletins Live! Two website[1], includes an ecological spray drift buffer requirement, this worksheet can be used to assist the user in determining the size of the required buffer. This worksheet can be used to calculate ecological buffer size in lieu of the Microsoft Excel calculator[2] or the Pesticide App for Label Mitigations (PALM)[3] EPA has also developed for this purpose. The calculator and descriptions of mitigation measures are found on EPA's Mitigation Menu Website[4]. This worksheet can be found online at https://www.epa.gov/pesticides/mitigation-menu

General Field/Management Unit Information (Optional Information – Does Not Impact Calculation)			
Name:			
Today's Date:			
Field/Management Unit Identification(s)[5]			
Crop(s)			
Pesticide Product Name(s)			
Target Application Date(s)			
Application Type (circle one)	Ground boom	Aerial	Airblast

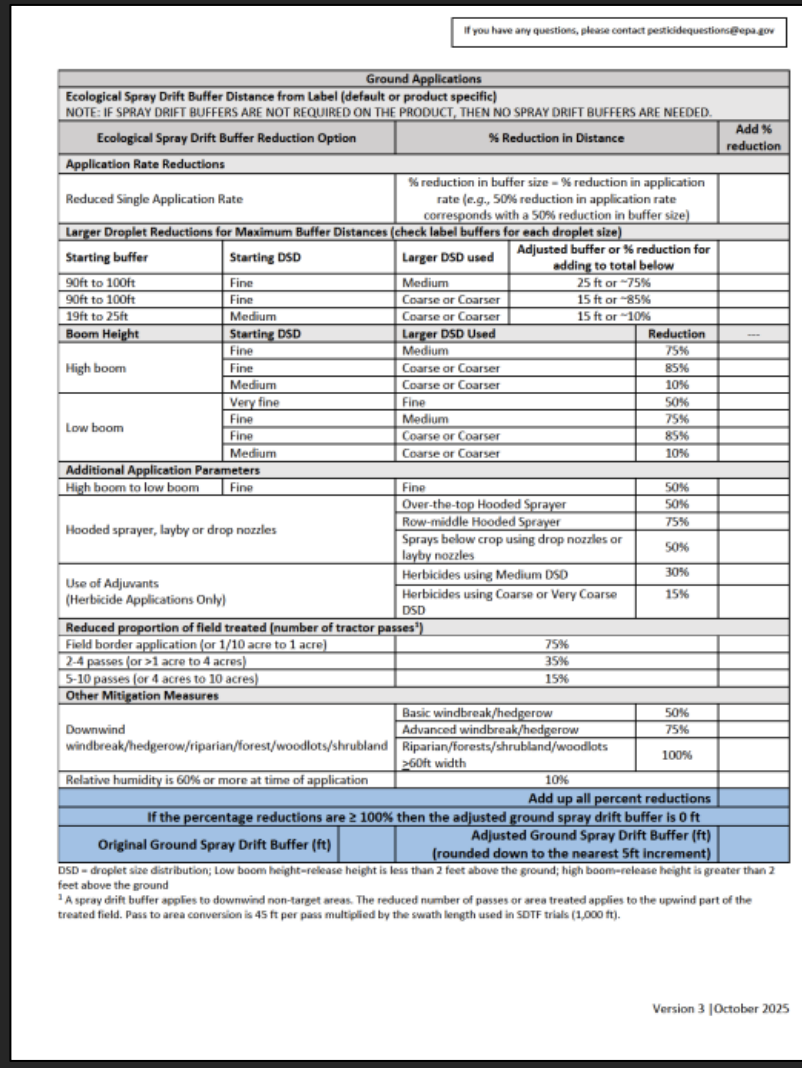
For this application, do any labels or bulletins for the products used reference EPA's Mitigation Menu Website when describing ecological spray drift buffer requirements? If yes, proceed. If no, this calculator cannot be used.

You may not have to use an ecological spray drift buffer if the answer is "yes" to any one bullet in any one of the following questions:	Yes	No
Do the planned application conditions fit any of these descriptions: • Chemigation methods, including: micro-sprinklers, drip-tape, drip emitters, subsurface or flood, and under non-permeable plastic surfaces • In-furrow sprays when nozzle height is <8 inches above soil surface; • Tree trunk drench, tree trunk paint, tree injection; • Soil injection; • Solid formulations that are used as a solid; • Less than 1/10 acre (<4356 square feet) treated and Spot treatment: <1000 square feet treated (e.g., when applied with backpack or hand held sprayers).	No ecological spray drift buffer required*	Continue calculating buffer size below
Are managed areas the only landscapes downwind for at least the length of the label required buffer? Managed areas are defined as: • Agricultural fields, pastures, forage fields, and private rangelands, including untreated portions of the treated field; • Roads, paved or gravel surfaces, mowed grassy/fallowed areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated area; • Buildings and their perimeters, silos, or other man-made structures with walls and/or roof; • Areas present and/or maintained as a runoff/erosion measure as listed on EPA's Mitigation Menu website. Examples include vegetative filter strips (VFS), field borders, grassed waterways, vegetated ditches, riparian areas, managed/constructed wetlands, or other areas of intentional habitat improvement; • Areas present and/or maintained as a drift buffer reduction measure as listed on EPA's Mitigation Menu website. Examples include vegetative windbreaks, hedgerows, shelterbelts, riparian areas, private forests, woodlots, and shrublands; • Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) lands (applicators may need to ensure that pesticide use does not cause degradation of the CRP habitat). • On-farm contained irrigation water resources that are not connected to adjacent water bodies, including on-farm irrigation canals and ditches, water conveyances, managed irrigation/runoff retention basins, farm ponds, and tailwater collection ponds.*		

*Note: Spray drift buffers may be required for other reasons (e.g. protection of human health).

[1] https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins
[2] Excel Mitigation Points Calculator available for download at https://www.epa.gov/pesticides/mitigation-menu
[3] https://www.epa.gov/pesticides/pesticide-app-label-mitigations
[4] https://www.epa.gov/pesticides/mitigation-menu and https://www.epa.gov/pesticides/menu-measure-descriptions. If the state has a more restrictive requirement, that must be followed instead. Not all measures are applicable to all fields and crops.
[5] A field or management unit is defined as the single contiguous piece of land that is managed as a single unit in production or in preparation for production of a single crop. A uniform field may be sub-divided based upon different crops (e.g., vegetables and leafy greens) or sub-divided based upon different features (e.g., flat portion and contoured portion).

Version 3 | October 2025



If you have any questions, please contact pesticidequestions@epa.gov

Ground Applications				
Ecological Spray Drift Buffer Distance from Label (default or product specific) NOTE: IF SPRAY DRIFT BUFFERS ARE NOT REQUIRED ON THE PRODUCT, THEN NO SPRAY DRIFT BUFFERS ARE NEEDED.				
Ecological Spray Drift Buffer Reduction Option		**% Reduction in Distance**		**Add % reduction**
Application Rate Reductions				
Reduced Single Application Rate		% reduction in buffer size = % reduction in application rate (e.g., 50% reduction in application rate corresponds with a 50% reduction in buffer size)		
Larger Droplet Reductions for Maximum Buffer Distances (check label buffers for each droplet size)				
Starting buffer	**Starting DSD**	**Larger DSD used**	**Adjusted buffer or % reduction for adding to total below**	
90ft to 100ft	Fine	Medium	25 ft or ~75%	
90ft to 100ft	Fine	Coarse or Coarser	15 ft or ~85%	
19ft to 25ft	Medium	Coarse or Coarser	15 ft or ~10%	
Boom Height	**Starting DSD**	**Larger DSD Used**	**Reduction**	---
High boom	Fine	Medium	75%	
	Fine	Coarse or Coarser	85%	
	Medium	Coarse or Coarser	10%	
Low boom	Very fine	Fine	50%	
	Fine	Medium	75%	
	Fine	Coarse or Coarser	85%	
	Medium	Coarse or Coarser	10%	
Additional Application Parameters				
High boom to low boom	Fine	Fine	50%	
Hooded sprayer, layby or drop nozzles		Over-the-top Hooded Sprayer	50%	
		Row-middle Hooded Sprayer	75%	
		Sprays below crop using drop nozzles or layby nozzles	50%	
Use of Adjuvants (Herbicide Applications Only)		Herbicides using Medium DSD	30%	
		Herbicides using Coarse or Very Coarse DSD	15%	
Reduced proportion of field treated (number of tractor passes[1])				
Field border application (or 1/10 acre to 1 acre)		75%		
2-4 passes (or >1 acre to 4 acres)		35%		
5-10 passes (or 4 acres to 10 acres)		15%		
Other Mitigation Measures				
Downwind windbreak/hedgerow/riparian/forest/woodlots/shrubland		Basic windbreak/hedgerow	50%	
		Advanced windbreak/hedgerow	75%	
		Riparian/forests/shrubland/woodlots ≥60ft width	100%	
Relative humidity is 60% or more at time of application		10%		
			Add up all percent reductions	
If the percentage reductions are ≥ 100% then the adjusted ground spray drift buffer is 0 ft				
Original Ground Spray Drift Buffer (ft)		**Adjusted Ground Spray Drift Buffer (ft) (rounded down to the nearest 5ft increment)**		

DSD = droplet size distribution; Low boom height=release height is less than 2 feet above the ground; high boom=release height is greater than 2 feet above the ground

[1] A spray drift buffer applies to downwind non-target areas. The reduced number of passes or area treated applies to the upwind part of the treated field. Pass to area conversion is 45 ft per pass multiplied by the swath length used in SDTF trials (1,000 ft).

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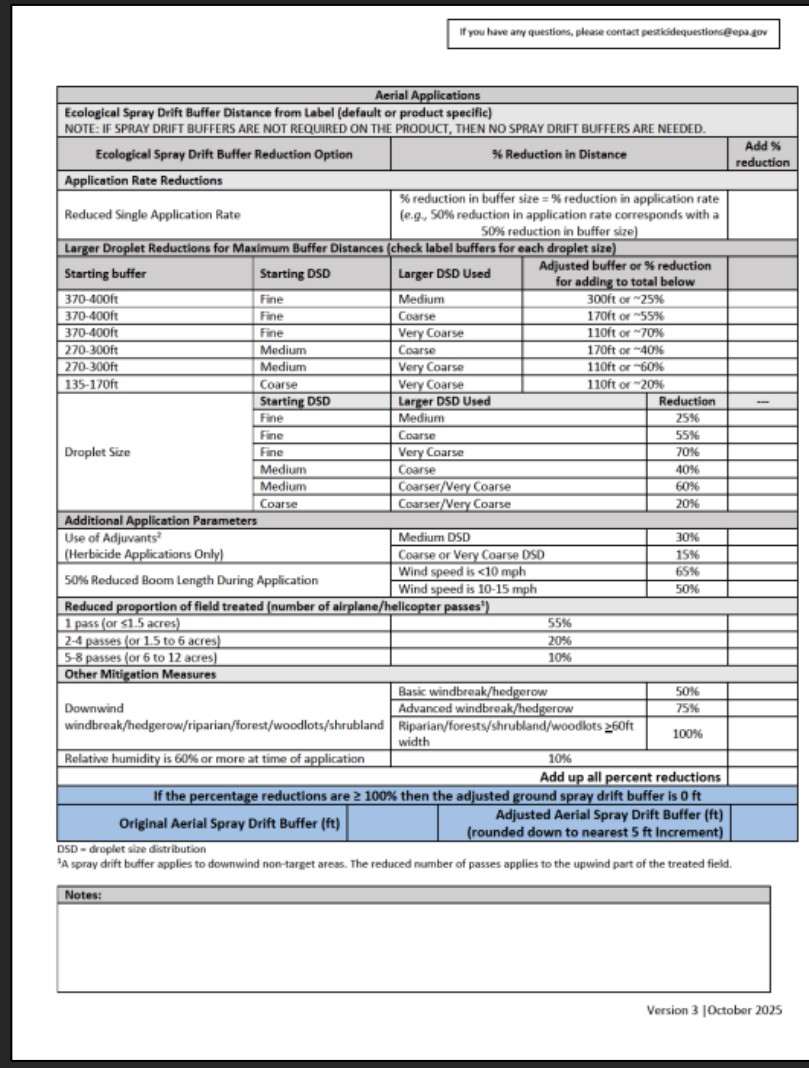


If you have any questions, please contact pesticidequestions@epa.gov

Aerial Applications				
Ecological Spray Drift Buffer Distance from Label (default or product specific) NOTE: IF SPRAY DRIFT BUFFERS ARE NOT REQUIRED ON THE PRODUCT, THEN NO SPRAY DRIFT BUFFERS ARE NEEDED.				
Ecological Spray Drift Buffer Reduction Option		**% Reduction in Distance**		**Add % reduction**
Application Rate Reductions				
Reduced Single Application Rate		% reduction in buffer size = % reduction in application rate (e.g., 50% reduction in application rate corresponds with a 50% reduction in buffer size)		
Larger Droplet Reductions for Maximum Buffer Distances (check label buffers for each droplet size)				
Starting buffer	**Starting DSD**	**Larger DSD Used**	**Adjusted buffer or % reduction for adding to total below**	
370-400ft	Fine	Medium	300ft or ~25%	
370-400ft	Fine	Coarse	170ft or ~55%	
370-400ft	Fine	Very Coarse	110ft or ~70%	
270-300ft	Medium	Coarse	170ft or ~40%	
270-300ft	Medium	Very Coarse	110ft or ~60%	
135-170ft	Coarse	Very Coarse	110ft or ~20%	
Droplet Size	**Starting DSD**	**Larger DSD Used**	**Reduction**	---
	Fine	Medium	25%	
	Fine	Coarse	55%	
	Fine	Very Coarse	70%	
	Medium	Coarse	40%	
	Medium	Coarser/Very Coarse	60%	
	Coarse	Coarser/Very Coarse	20%	
Additional Application Parameters				
Use of Adjuvants[2] (Herbicide Applications Only)		Medium DSD	30%	
		Coarse or Very Coarse DSD	15%	
50% Reduced Boom Length During Application		Wind speed is <10 mph	65%	
		Wind speed is 10-15 mph	50%	
Reduced proportion of field treated (number of airplane/helicopter passes[1])				
1 pass (or ≤1.5 acres)		55%		
2-4 passes (or 1.5 to 6 acres)		20%		
5-8 passes (or 6 to 12 acres)		10%		
Other Mitigation Measures				
Downwind windbreak/hedgerow/riparian/forest/woodlots/shrubland		Basic windbreak/hedgerow	50%	
		Advanced windbreak/hedgerow	75%	
		Riparian/forests/shrubland/woodlots ≥60ft width	100%	
Relative humidity is 60% or more at time of application		10%		
			Add up all percent reductions	
If the percentage reductions are ≥ 100% then the adjusted ground spray drift buffer is 0 ft				
Original Aerial Spray Drift Buffer (ft)		**Adjusted Aerial Spray Drift Buffer (ft) (rounded down to nearest 5 ft Increment)**		

DSD = droplet size distribution

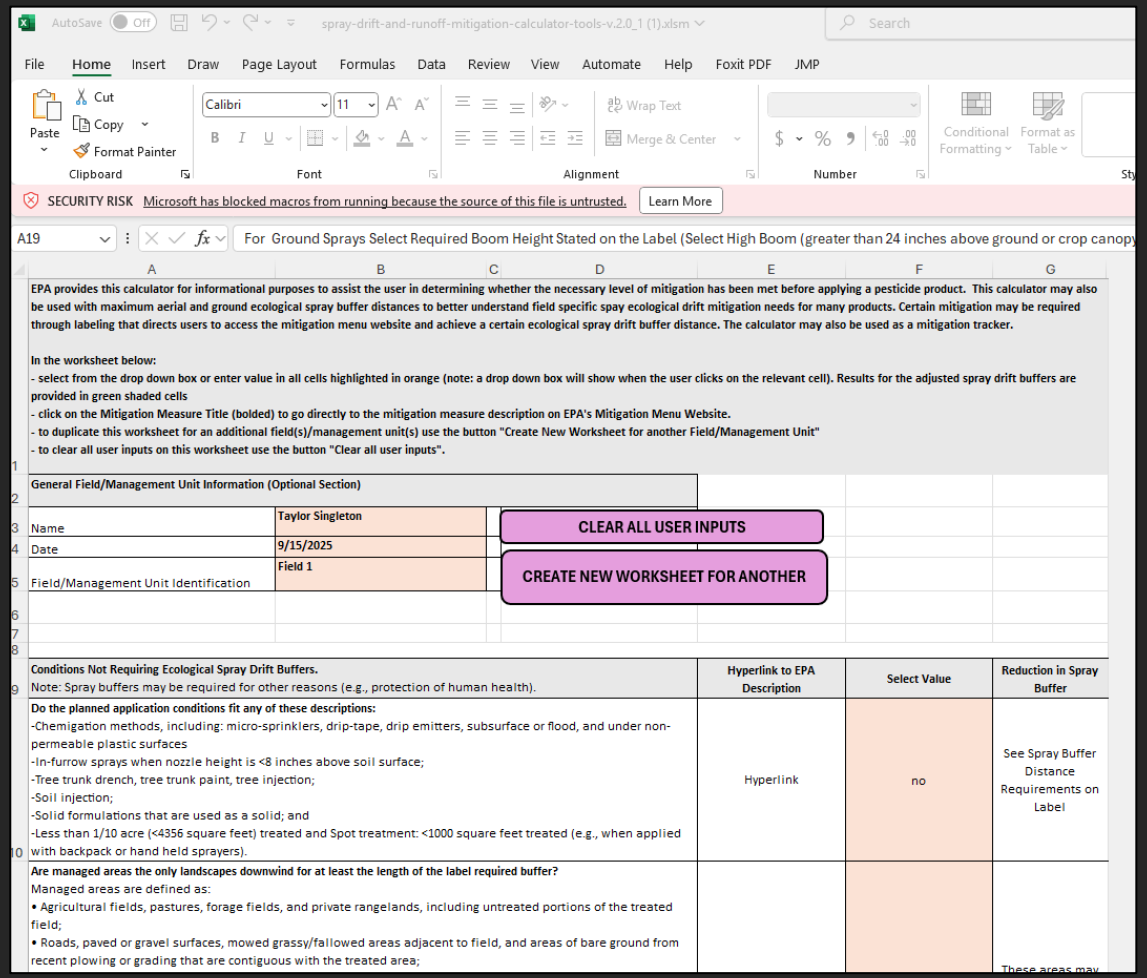
[1] A spray drift buffer applies to downwind non-target areas. The reduced number of passes applies to the upwind part of the treated field.

Notes:

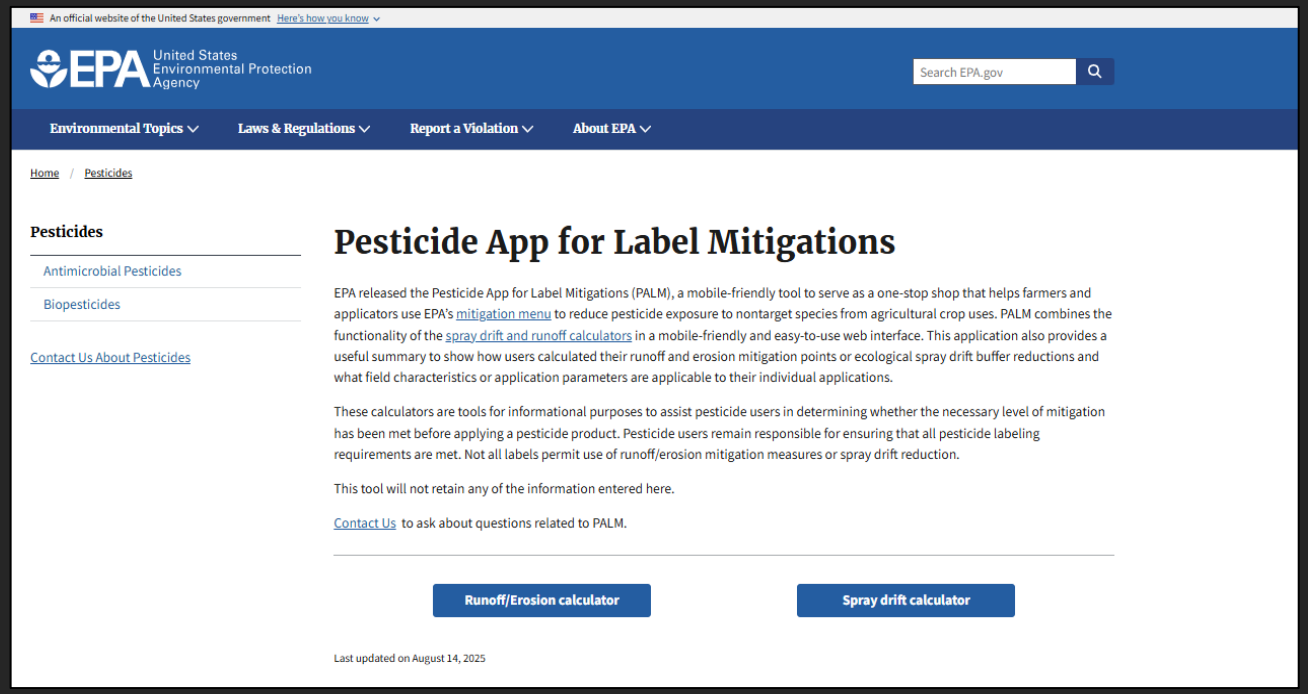
Version 3 | October 2025

https://www.epa.gov/system/files/documents/2025-06/spray-drift-mitigation-worksheet-april-2025-v2.pdf

Calculators Available!!!

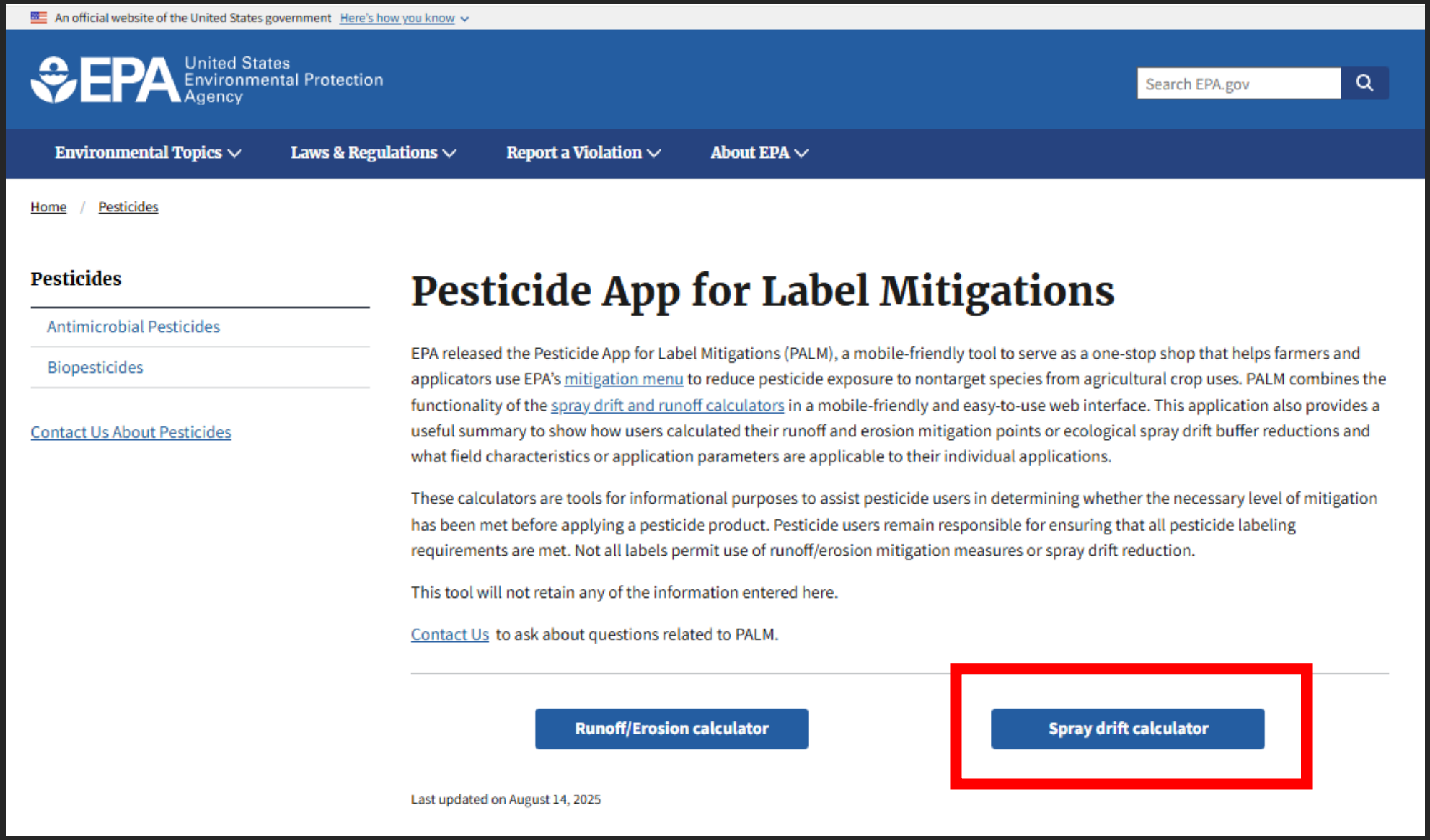


Excel Spreadsheet – In-depth, downloadable



App – Web-based, mobile friendly….SIMPLE

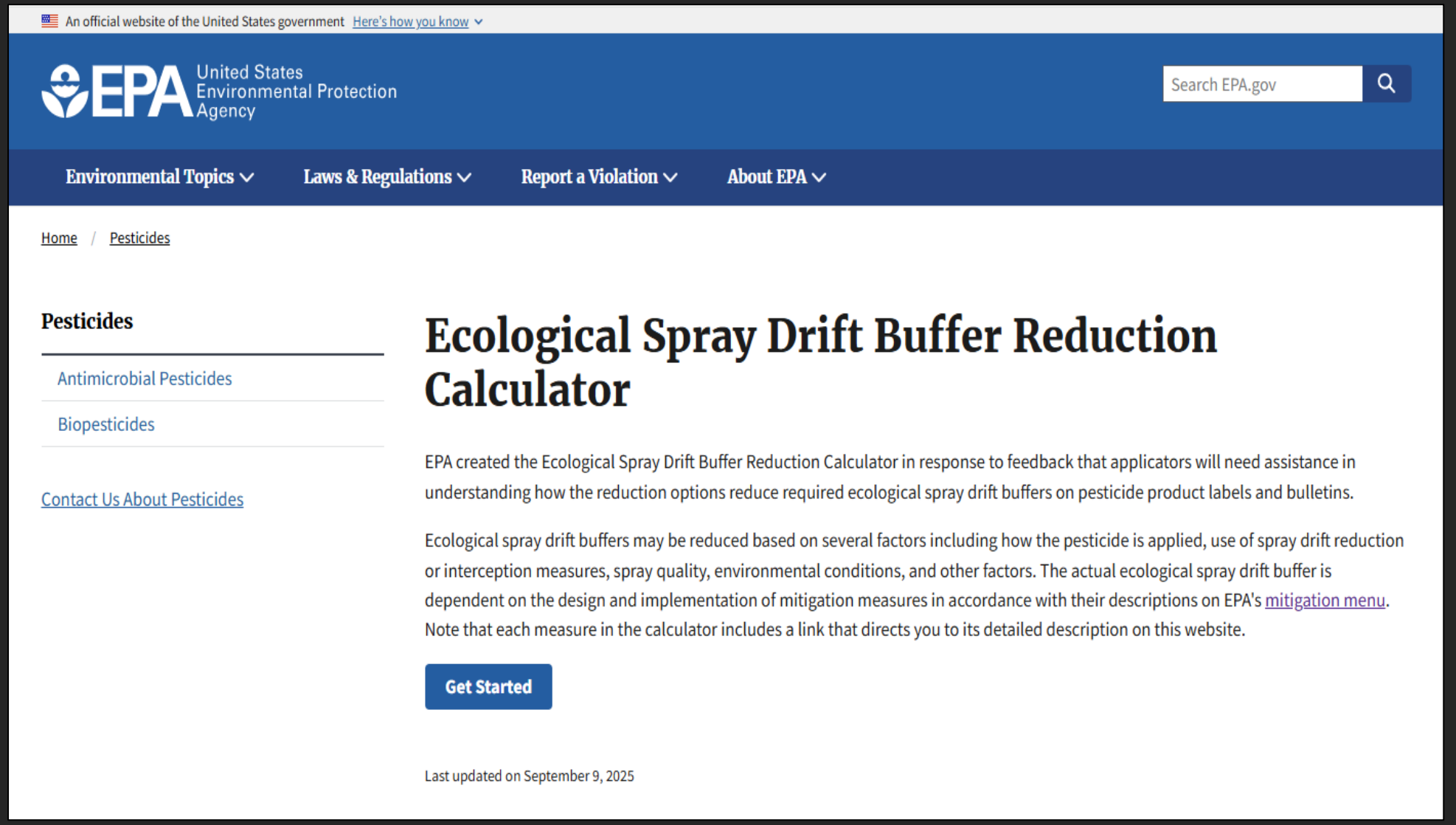
PALM App



Mobile friendly!

https://www.epa.gov/pesticides/pesticide-app-label-mitigations

PALM App



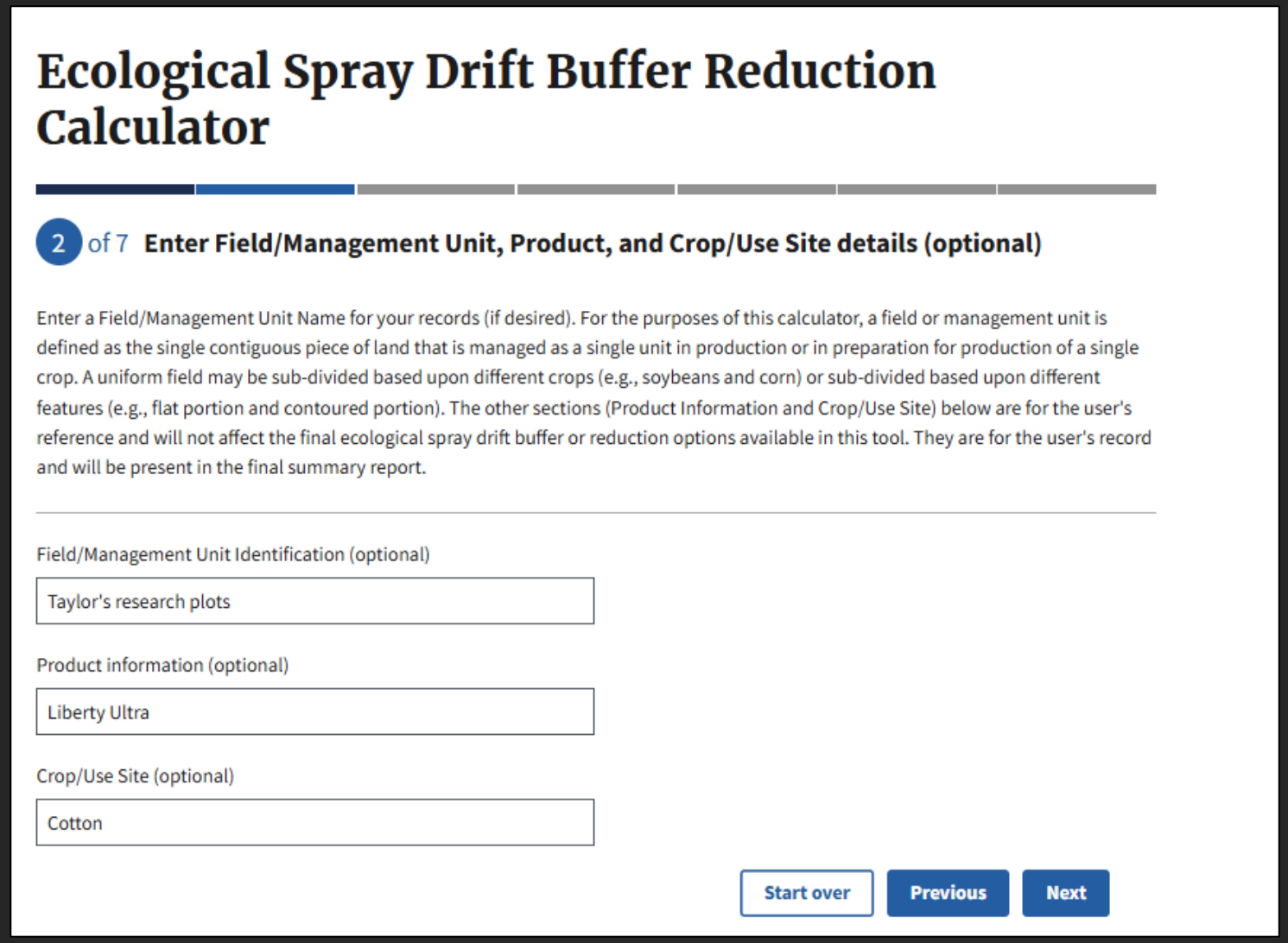
Mobile friendly!

https://www.epa.gov/pesticides/pesticide-app-label-mitigations

Buffer Reduction Calculator – Ground Example

Buffer Reduction Calculator – Ground Example

- Can “group” fields
- Field is defined as a piece of land managed as a single unit (i.e crop)
- Can be divided based on crop, features, etc.



Buffer Reduction Calculator – Ground Example

Ecological Spray Drift Buffer Reduction Calculator

3 of 7 **Select Application Type**

Select application type*

- (●) Ground boom
- ( ) Aerial
- ( ) Airblast

Start over | Previous | Next

Buffer Reduction Calculator – Ground Example

Ecological Spray Drift Buffer Reduction Calculator

4 of 7 **Conditions Not Requiring Ecological Spray Drift Buffers**

Note: Spray buffers may be required for other reasons (e.g., protection of human health).

Do the planned application conditions fit any of these descriptions:

View the description of this measure

- Chemigation methods, including: micro-sprinklers, drip-tape, drip emitters, subsurface or flood, and under non-permeable plastic surfaces
- In-furrow sprays when nozzle height is <8 inches above soil surface;
- Tree trunk drench, tree trunk paint, tree injection;
- Soil injection;
- Solid formulations that are used as a solid (e.g., the planting of treated seed or use of a treated propagule, or granular formulation); and
- Less than 1/10 acre (<4356 square feet) treated and Spot treatment: <1000 square feet treated (e.g., when applied with backpack or hand held sprayers).

○ Yes
◉ No

Are managed areas the only landscapes downwind for at least the length of the label required buffer?

View the description of this measure

Managed areas are defined as:

- Agricultural fields, pastures, forage fields, and private rangelands, including untreated portions of the treated field;
- Roads, paved or gravel surfaces, mowed grassy/fallowed areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated area;
- Buildings and their perimeters, silos, or other man-made structures with walls and/or roof;
- Areas present and/or maintained as a runoff/erosion measure as listed on EPA's Mitigation Menu website. Examples include vegetative filter strips (VFS), field borders, grassed waterways, vegetated ditches that keep irrigated water on-farm, riparian areas, managed/constructed wetlands, or other areas of intentional habitat improvement;
- Areas present and/or maintained as a drift buffer reduction measure as listed on EPA's Mitigation Menu website. Examples include vegetative windbreaks, hedgerows, shelterbelts, riparian areas, private forests, woodlots, and shrublands;
- Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) lands (applicators may need to ensure that pesticide use does not cause degradation of the CRP habitat).
- On-farm contained irrigation water resources that are not connected to adjacent water bodies, including on-farm irrigation canals and ditches, water conveyances, managed irrigation/runoff retention basins, farm ponds, and tailwater collection ponds.

○ Yes
◉ No

Start over | Previous | Next

Buffer Reduction Calculator – Ground Example

9.0 MANDATORY SPRAY DRIFT MANAGEMENT

9.1 MANDATORY SPRAY DRIFT MITIGATIONS

9.1.1 For Aerial and Ground Boom Applications:

- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- Select nozzle and pressure that deliver medium or coarser spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with American Society of Agricultural & Biological Engineers standards 572.1 and 641 (ASABE S572 and S641).
- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes) must register between 3 and 15 miles per hour.
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- **DO NOT** apply during temperature inversions.

9.1.2 For Aerial Applications:

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft to minimize drift caused by wing tip or rotor blade vortices.
- Wind speed and direction must be measured on location using a windsock, an anemometer (including systems to measure wind speed or velocity on an aircraft), or an aircraft smoke system.
- When the wind speed is between 11 to 15 miles per hour, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- When the wind speed is between 11 to 15 miles per hour, applicators must use a minimum of 3/4 swath displacement upwind at the downwind edge of the field. Otherwise, applicators must use a minimum of 1/2 swath displacement upwind at the downwind edge of the field.
- **DO NOT** release spray at a height greater than 10 ft above the crop canopy unless a greater application height is required for pilot safety.

9.1.3 For Ground Boom Application:

- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions.
- Wind speed and direction must be measured on location using a windsock or anemometer (including systems to measure wind speed or velocity using application equipment).

9.2 Mandatory Spray Drift Buffers

9.2.1 For aerial and ground applications, maintain a downwind buffer between the last spray row and the protection area as follows:

Application Method	Droplet Size Distribution (DSD)	Minimum Buffer Distance
Aerial	medium	50 ft
Ground	medium to coarser	10 ft

Protection areas include all areas with the following exceptions which can be included in the buffer footage, provided that people are not present within the application exclusion zone during the application, and they will not be contacted by the pesticide, either directly or through drift (see 40 CFR 170.405(a) and 40 CFR 170.505(a)):

- Agricultural fields, including untreated portions of the treated field.
- Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground

Ecological Spray Drift Buffer Reduction Calculator

5 of 7 **Product Specific Application Information**

Adjusted ground spray drift buffer (ft)
10

Enter Ecological Spray Drift Buffer Distance from Product Label or Bulletins Live! Two (ft) as Applicable.

10

Select Minimum Spray Droplet Size Indicated on Product Label. If your label does not specify a droplet size, use medium.

Medium

Select Spray Droplet Size for Planned Application

Medium

Droplet Size Reduction (automatically calculated based on product entry information):
Only applicable if product label allows medium or finer droplets, and intended application droplet is coarser than the label.

View the description of this measure

For Ground Sprays Select Required Boom Height Stated on the Label (Select High Boom (greater than 24 inches above ground or crop canopy) or Low Boom (24 inches or less above ground or crop canopy))

Low boom

Start over | Previous | Next

Buffer Reduction Calculator – Ground Example

- **DO NOT** make more than 1 application per year for burndown use for **LibertyLink** or glufosinate-resistant sweet corn.
- These crop specific restrictions are in addition to the **Section 13.0 General Use Restrictions (All Crops)**.

15.4 Cotton Not registered for use by California

15.4.1 LibertyLink® or Glufosinate-resistant Cotton In-crop Applications

Apply **Liberty® ULTRA herbicide — Powered by Glu-L™ Technology** only to cotton labeled as **LibertyLink** or glufosinate-resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control. Tank mixes with emulsifiable concentrate (EC) formulations may result in temporary crop injury. These tank mixes are not advised when cotton plants are exhibiting slow growth or vigor.

Application Timing	• Emergence up to early bloom.
Application Use Rate	• Apply 19 to 29 fl ozs/A depending on weed species, size, and density per the **Weeds Controlled** section. • Up to 3 applications may be applied with a minimum of 10 days between applications up to a maximum of 58 fl ozs/A per year.
Maximum per Year	• 58 fl ozs/A

15.4.2 LibertyLink® or Glufosinate-resistant Cotton for Seed Propagation

Liberty ULTRA may be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry a gene that imparts resistance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the glufosinate-ammonium resistance gene will be severely injured or killed if treated with this herbicide.

Application Timing	• Emergence up to early bloom.
Application Use Rate	• Apply 19 to 29 fl ozs/A. • Up to 3 applications may be applied with a minimum of 10 days between applications up to a maximum of 58 fl ozs/A per year.
Maximum per Year	• 58 fl ozs/A

15.4.3 Burndown Use Prior to Planting or Prior to Emergence of LibertyLink® or Glufosinate-resistant Cotton

Liberty ULTRA may also be applied as a burndown treatment prior to planting or prior to emergence of **LibertyLink** or glufosinate-resistant Cotton. **Liberty ULTRA** may also be used as a substitute for tillage in fallow fields to control or suppress weeds. Use of **Liberty ULTRA** for burn-down use prior to planting **LibertyLink** or glufosinate-resistant crops will limit the amount of **Liberty ULTRA** that may be used in-crop. Refer to the maximum amount per year for the total amount of **Liberty ULTRA** that may be used.

Burndown (fl ozs/A)	**Additional In-crop Applications if a Burndown Application Made**	**Maximum Per Year** (fl ozs/A)
22 to 29	Up to 1 application at 22 to 29 fl ozs/A	58

Adjusted ground spray drift buffer (ft)

No ecological spray drift buffer is needed.

Enter Required Maximum Labeled Application Rate for Planned Use (keep units of application the same; e.g., oz product/A)

29

Enter Planned Application Rate for this Application (keep units of application the same; e.g., oz product/A)

29

Reduced Single Application Rate (automatically calculated based on product entry information that was input in the above fields):

0%

View the description of this measure

Select the width of the application area or number of acres to be applied

View the description of this measure

Not applicable

Low Boom Application (24 inches or less above ground or crop canopy; applicable only for fine droplets)

View the description of this measure

- ○ Yes
- ◉ No

For Herbicide Application ONLY - Use of Drift Reducing Agents

View the description of this measure

- ○ Yes
- ◉ No

Hooded Sprayers, Layby Nozzles, Drop Nozzles

View the description of this measure

Not applicable

Select applicable downwind windbreak, hedgerow, riparian, forest, woodlots, shrubland

View the description of this measure

Not applicable

Relative humidity is 60% or more at time of application?

View the description of this measure

- ◉ Yes
- ○ No

Buffer Reduction Calculator – Ground Example

Adjusted ground spray drift buffer (ft)

No ecological spray drift buffer is needed.

Date created: December 1, 2025, application version 0.1.4.

EPA

Results Summary

- For field ID: Taylor's research plots
- Product information: Liberty Ultra
- Crop/use site: Cotton
- Ecological spray drift buffer needed (specified on label): **10 feet**
- Adjusted ground spray drift buffer (calculated based on drift reduction measures): **5 feet**

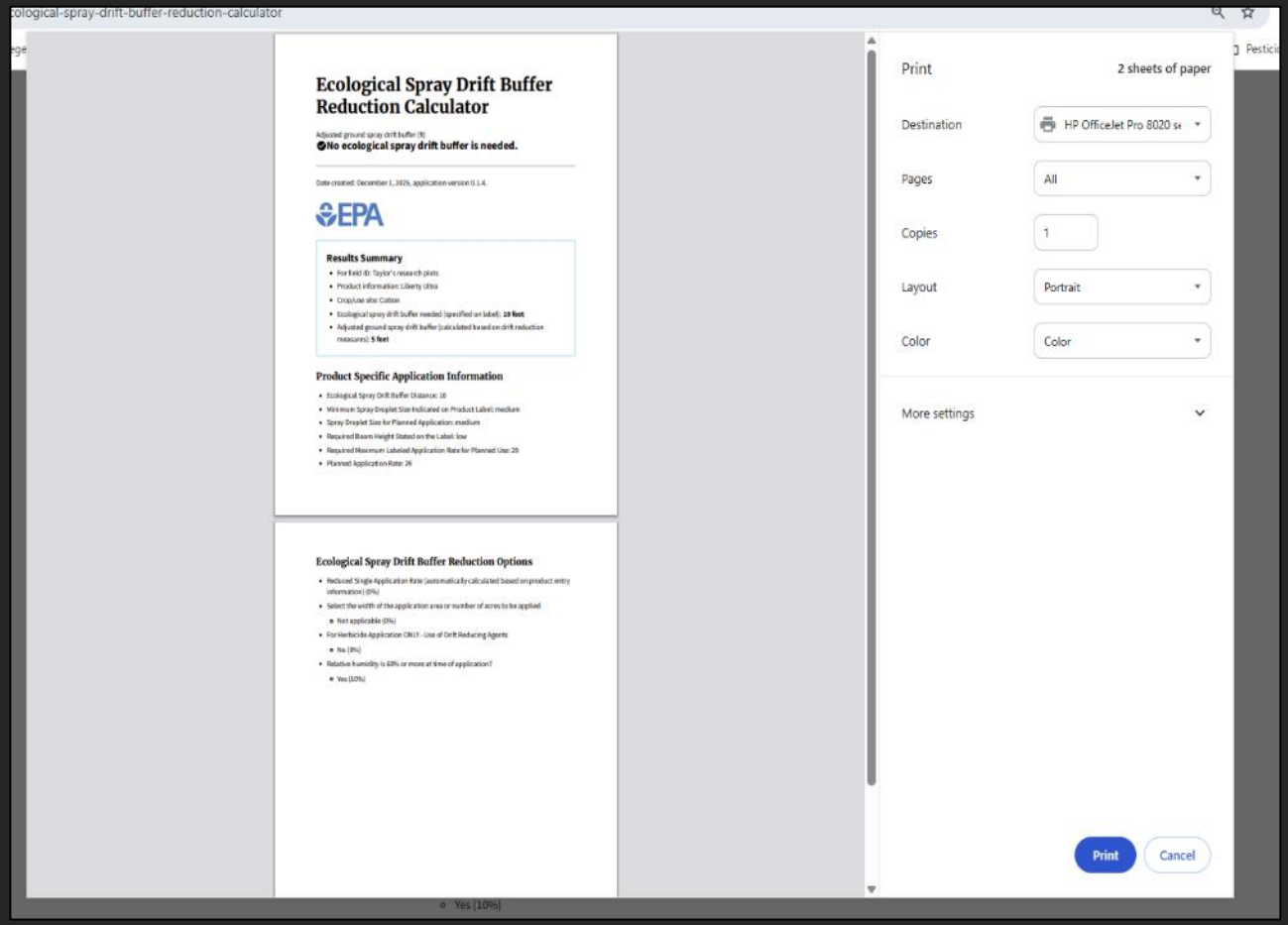
Product Specific Application Information

- Ecological Spray Drift Buffer Distance: 10
- Minimum Spray Droplet Size Indicated on Product Label: medium
- Spray Droplet Size for Planned Application: medium
- Required Boom Height Stated on the Label: low
- Required Maximum Labeled Application Rate for Planned Use: 29
- Planned Application Rate: 29

Ecological Spray Drift Buffer Reduction Options

- Reduced Single Application Rate (automatically calculated based on product entry information) (0%)
- Select the width of the application area or number of acres to be applied
  - Not applicable (0%)
- For Herbicide Application ONLY - Use of Drift Reducing Agents
  - No (0%)
- Relative humidity is 60% or more at time of application?
  - Yes (10%)

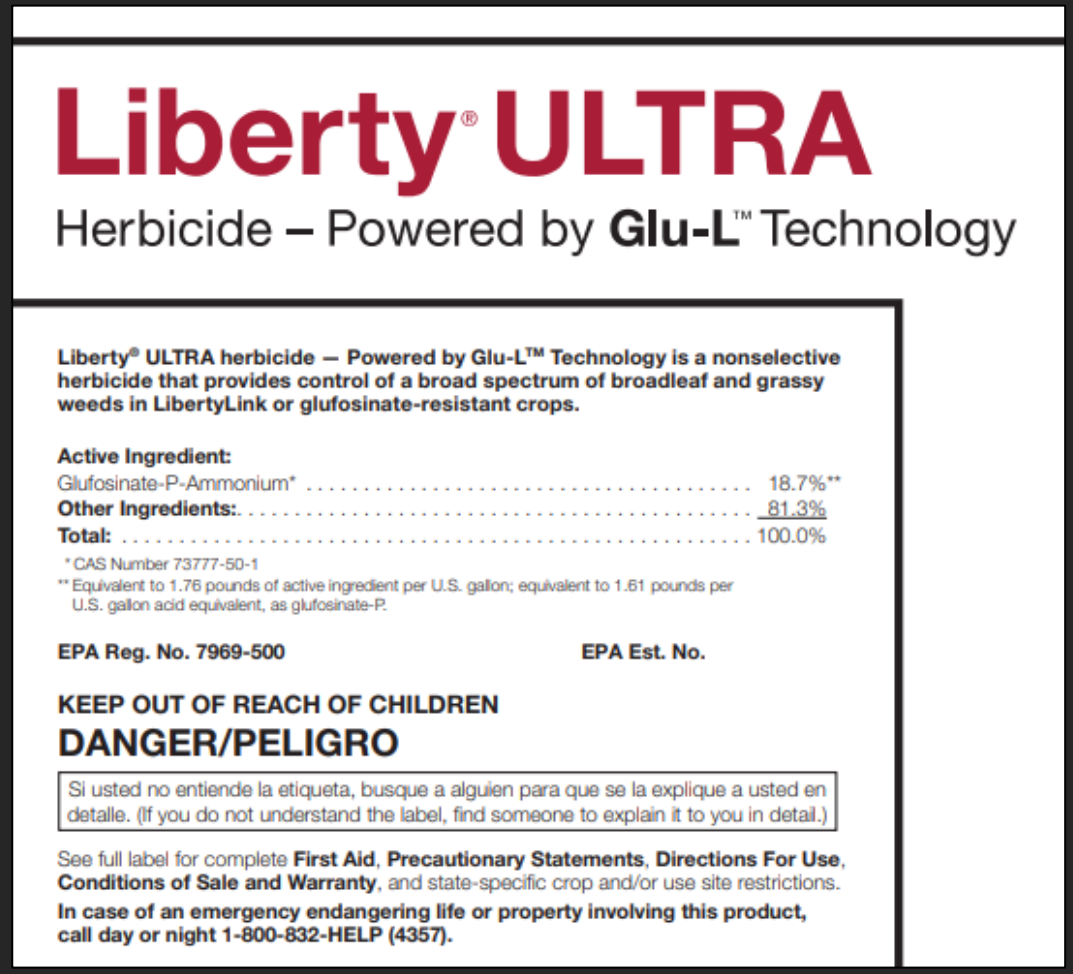
Print | Start over | Previous



New Label Additions

Three New Sections:

1. *BLT*
   - *Are you in a PULA?*
2. *Spray drift mitigation*
   - "Mandatory Spray Drift Buffers"
3. ***Runoff/erosion mitigation***
   - ***"Mandatory Runoff Mitigation"***



Liberty® ULTRA

Herbicide – Powered by Glu-L™ Technology

Liberty® ULTRA herbicide — Powered by Glu-L™ Technology is a nonselective herbicide that provides control of a broad spectrum of broadleaf and grassy weeds in LibertyLink or glufosinate-resistant crops.

Active Ingredient:

Glufosinate-P-Ammonium* 18.7%**

Other Ingredients: 81.3%

Total: 100.0%

* CAS Number 73777-50-1

** Equivalent to 1.76 pounds of active ingredient per U.S. gallon; equivalent to 1.61 pounds per U.S. gallon acid equivalent, as glufosinate-P.

EPA Reg. No. 7969-500 **EPA Est. No.**

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See full label for complete **First Aid**, **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

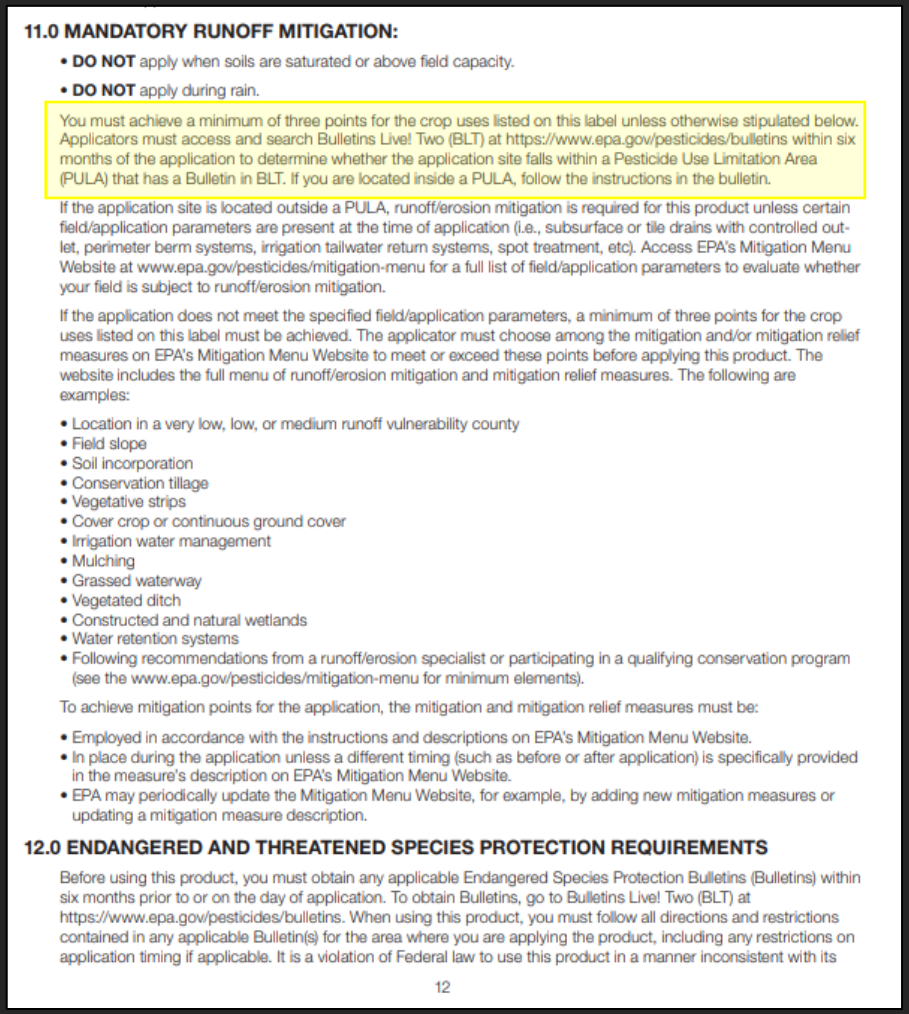
Runoff/Erosion Mitigation

Label will outline what mitigations are necessary:

- *0-9 points required by label:*
  - Herbicide/use dependent

Potential Reduction?	Points
Low	1
Medium	2
High	3

40+ practices included on the mitigation menu



11.0 MANDATORY RUNOFF MITIGATION:

- **DO NOT** apply when soils are saturated or above field capacity.
- **DO NOT** apply during rain.

You must achieve a minimum of three points for the crop uses listed on this label unless otherwise stipulated below. Applicators must access and search Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins within six months of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA) that has a Bulletin in BLT. If you are located inside a PULA, follow the instructions in the bulletin.

If the application site is located outside a PULA, runoff/erosion mitigation is required for this product unless certain field/application parameters are present at the time of application (i.e., subsurface or tile drains with controlled outlet, perimeter berm systems, irrigation tailwater return systems, spot treatment, etc). Access EPA's Mitigation Menu Website at www.epa.gov/pesticides/mitigation-menu for a full list of field/application parameters to evaluate whether your field is subject to runoff/erosion mitigation.

If the application does not meet the specified field/application parameters, a minimum of three points for the crop uses listed on this label must be achieved. The applicator must choose among the mitigation and/or mitigation relief measures on EPA's Mitigation Menu Website to meet or exceed these points before applying this product. The website includes the full menu of runoff/erosion mitigation and mitigation relief measures. The following are examples:

- Location in a very low, low, or medium runoff vulnerability county
- Field slope
- Soil incorporation
- Conservation tillage
- Vegetative strips
- Cover crop or continuous ground cover
- Irrigation water management
- Mulching
- Grassed waterway
- Vegetated ditch
- Constructed and natural wetlands
- Water retention systems
- Following recommendations from a runoff/erosion specialist or participating in a qualifying conservation program (see the www.epa.gov/pesticides/mitigation-menu for minimum elements).

To achieve mitigation points for the application, the mitigation and mitigation relief measures must be:

- Employed in accordance with the instructions and descriptions on EPA's Mitigation Menu Website.
- In place during the application unless a different timing (such as before or after application) is specifically provided in the measure's description on EPA's Mitigation Menu Website.
- EPA may periodically update the Mitigation Menu Website, for example, by adding new mitigation measures or updating a mitigation measure description.

12.0 ENDANGERED AND THREATENED SPECIES PROTECTION REQUIREMENTS

Before using this product, you must obtain any applicable Endangered Species Protection Bulletins (Bulletins) within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its

12

Runoff/Erosion Mitigation Menu

- **Field Management**
  - Contour farming
  - Cover crop
  - Grassed waterway
  - In-field vegetative filter strip
  - Irrigation water management
  - Mulching with natural materials
  - Residue tillage management
  - Terrace farming

- **Field Characteristics**
  - Application to sand, loamy sand, or sandy loam soil without a restrictive layer
  - Flat or nearly flat field
  - Fields in western farmland

- **Application Parameters**
  - Rate reduction (points based on percent reduction in application rate)
  - Soil incorporation

- **Adjacent to the Field or In-between field and Habitat**
  - 30-ft vegetative filter strip
  - Riparian area
  - Vegetated ditch

- **Other Mitigations**
  - Water retention system
  - Both on-field and adjacent to the field mitigation utilized

Plus, MORE – Over 40+ options available

U.S. EPA Slide From Herbicide Strategy

PDF Worksheet Available

PESTICIDE RUNOFF/EROSION MITIGATION POINTS CALCULATION WORKSHEET

When the pesticide product label or endangered species protection bulletin, found on the Bulletins Live! Two website[1], instructs a user to achieve runoff or erosion points, this worksheet can be used to assist the user in determining whether the necessary level of mitigation has been met before applying a pesticide product. This worksheet can be used to track the number of points a user has achieved in lieu of the Microsoft Excel calculator[2] or the Pesticide App for Label Mitigations (PALM)[3] EPA has also developed for this purpose. The calculator and descriptions of mitigation measures are found on EPA's Mitigation Menu Website. This worksheet can be found online at https://www.epa.gov/pesticides/mitigation-menu

General Field/Management Unit Information (Optional Information – Does not Impact Calculation)	
Name:	
Today's Date:	
Field/Management Unit Identification(s)[4]	
Crop(s)	
Pesticide Product Name(s)	
Target Application Date(s)	

You may not have to implement any additional runoff/erosion measures for applications if the answer is "yes" to any one bullet in any one of the following questions:	Yes	No
Does the application area (farm/field) use any of the following systems that capture runoff and discharge? • Perimeter berm system (permanent berms, elevated border/perimeter) present at the time of application and throughout the cropping season • Irrigation tailwater return system • Subsurface or tile drainage with controlled outlet	No further runoff/ erosion mitigation needed	Continue calculating mitigation points below
Does the application use any of the following application methods or parameters? • Soil injection • Tree injection • Chemigation applied to the subsurface and under non-permeable plastic mulch • Spot treatment (<1000 square feet) • Less than 1/10 acre treated		
Are you participating in an EPA-Qualified Conservation Program?		
Are the areas within 1,000ft down-gradient from the treated farm/field comprised entirely of managed areas? Managed areas may include: • Agricultural fields, including untreated portions of the treated field • Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground • Buildings and their perimeters, silos, or man-made structures • Vegetative filter strips, field borders, hedgerows, Conservation Reserve Program lands, and other areas for spray drift or runoff mitigation • Managed wetlands • On-farm contained irrigation water sources that are not connected to adjacent water bodies		

Required Number of Mitigation Points (from label – if applicable)	Required Number of Mitigation Points (from bulletin – if applicable)	Other restrictions of note

[1] Bulletins Live! Two Website: https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins
[2] Excel Mitigation Points Calculator available for download at https://www.epa.gov/pesticides/mitigation-menu
[3] PALM: https://www.epa.gov/pesticides/pesticide-app-label-mitigations
[4] A field or management unit is defined as the single contiguous piece of land that is managed as a single unit in production or in preparation for production of a single crop. A uniform field may be sub-divided based upon different crops (e.g., vegetables and leafy greens) or sub-divided based upon different features (e.g., flat portion and contoured portion)

If you have any questions, please contact pesticidequestions@epa.gov

Runoff/erosion mitigation options				
Mitigation Measure Title[1]	**Measures Included in Mitigation Category[1,2]**		**Points**	**Score**
Systems that Capture Runoff and Discharge				
Water Retention Systems	Sediment basins, catch basins, sediment traps, water retention ponds		2	
Subsurface drainages and tile drainage installed without controlled drainage structure	Subsurface tile drains, tile drains without controlled drainage structure		1	
Pesticide Runoff Vulnerability and Field Characteristics				
County-based mitigation relief	Your county may receive mitigation relief points if in a geographic area with reduced pesticide runoff vulnerability. Check the runoff vulnerability credit of your location at https://www.epa.gov/system/files/documents/2024-10/county-mitigation-relief-points-runoff-vulnerability.pdf	Pesticide runoff vulnerability - very low	6	
		Pesticide runoff vulnerability - low	3	
		Pesticide runoff vulnerability - medium	2	
		Pesticide runoff vulnerability - high	0	
Conservation Program and Runoff/Erosion Specialists/Mitigation Tracking				
Mitigation Tracking	Documented at the field or farm level, using paper or electronic format (using this worksheet counts for this measure)		1	
Runoff/Erosion Specialists **OR** Conservation Program	Working with and following recommendations from a technical specialist		1	
	Participating in a conservation program		2	
Field Characteristics[3]				
Field with Slope ≤ 3%	Field slope ≤3% (naturally low slope or flat fields; flat laser leveled fields)		2	
Predominantly Sandy Soils[4]	Moderately sandy soils: Fields with 10-20% clay and 50-90% sand (HSG B type soils)		2	
	Predominately sandy soils: Fields with ≤10% clay and ≥90% sand (HSG A type soils)		3	
In-Field Mitigation Measures[5]				
Conservation Tillage [Select one]	No-till		3	
	Reduced tillage, mulch tillage, strip till, ridge tillage		2	
Reservoir Tillage	Reservoir tillage, furrow diking, basin tillage		3	
Contour Farming	Contour farming, contour tillage, contour orchard and perennial crops		2	
Vegetative Strips – In-Field	Inter-row vegetated strips, strip cropping, alley cropping, prairie strips, contour buffer strips, contour strip cropping, prairie strip, alley cropping, vegetative barrier (occurring in a contoured field)		2	
Terrace Farming	Terrace farming, terracing, field terracing		2	
Cover Crop/Continuous Ground Cover [Select one]	Cover crop or continuous ground cover; with tillage		1	
	Cover crop or continuous ground cover; no tillage; short-term cover crop		2	
	Cover crop or continuous ground cover; no tillage; long-term cover crop		3	
Irrigation Water Management [Select one]	Use of soil moisture sensors/evapotranspiration meters with center pivots & sprinklers; above ground drip tape, drip emitters; micro-sprinklers		2	
	Use of below tarp irrigation, below ground drip tape		3	
	; dry farming, non-irrigated lands; no irrigation		3	
Mulching [Select one]	Mulching with permeable artificial materials (i.e., landscape fabrics, synthetic mulches)		1	
	Mulching with natural materials		3	
Anionic Polyacrylamide (PAM)	Use of Anionic Polyacrylamide (PAM)		2	
Erosion Barriers	Wattles; silt fences		2	
Adjacent to Field Mitigations[6]				

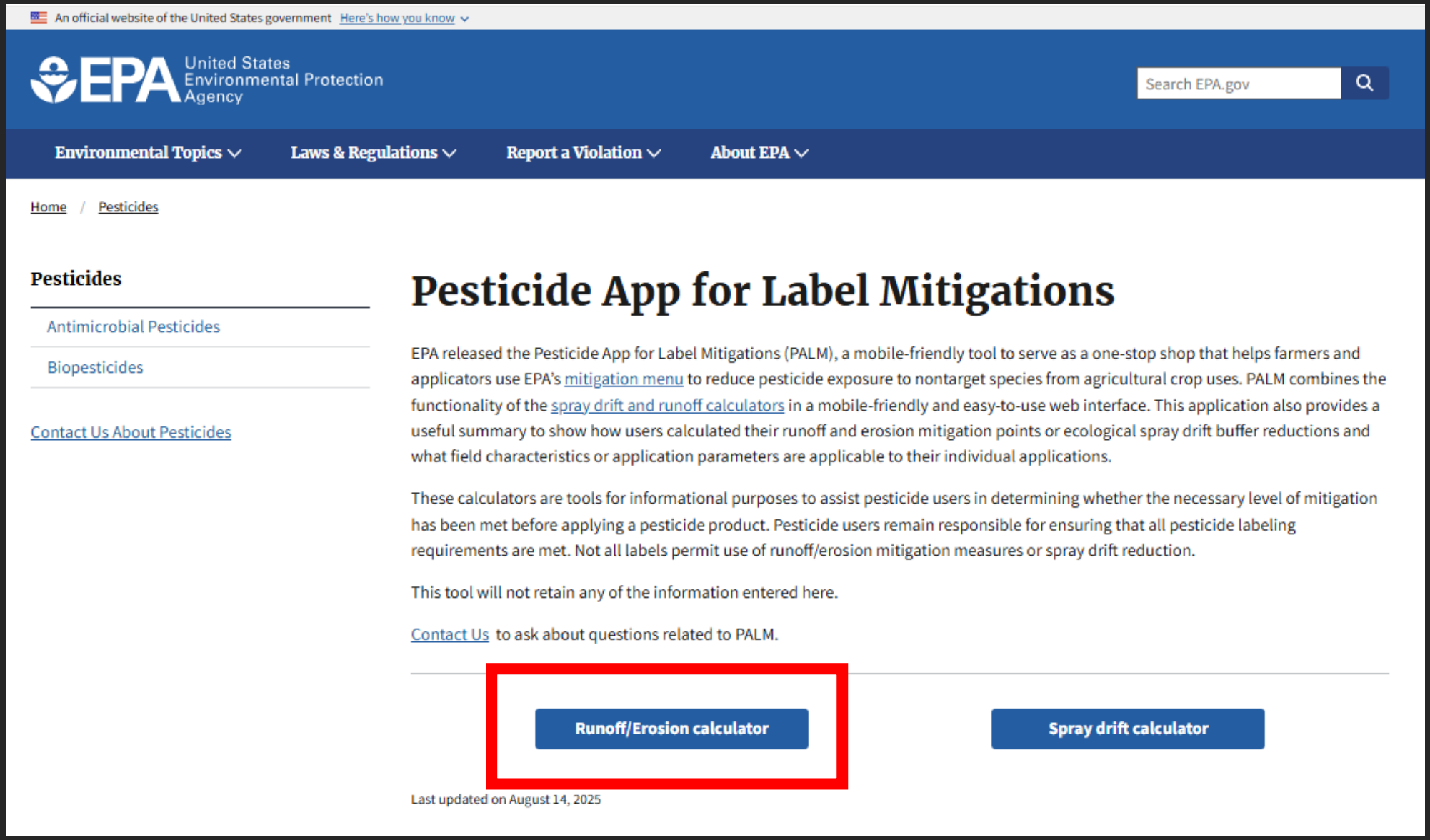
If you have any questions, please contact pesticidequestions@epa.gov

Runoff/erosion mitigation options			
Mitigation Measure Title[1]	**Measures Included in Mitigation Category[1,2]**	**Points**	**Score**
Grassed Waterway	Grassed waterway	2	
Vegetative filter strips (VFS) or field border adjacent to field [Select one]	20 to <30 feet wide	1	
	30 to <60 feet wide	2	
	≥60 feet wide	3	
Vegetated Ditch	Vegetated drainage ditch	1	
Riparian area; riparian forest buffer; riparian herbaceous cover [Select one]	20 to <30 feet	1	
	30 to <60 feet	2	
	≥60 ft	3	
Constructed and Natural Wetlands	Constructed and natural wetlands, wetland and riparian landscape/habitat improvement	3	
Terrestrial Habitat Landscape Improvement [Select one]	20 to <30 feet	1	
	30 to <60 feet	2	
	≥60 ft	3	
Filtering Devices [Select one]	Filters, sleeves, socks, or filtration units containing activated carbon	3	
	Filters, sleeves, socks, or filtration units containing compost amendments	1	
Other Mitigation Measures[6]			
Using mitigation measures from multiple categories	Practices must be used from at least 2 of the following categories: in-field, field-adjacent, or systems that capture runoff and discharge[6]	1	
Application Parameters			
Annual Application Rate Reduction [Select one]	Any application 10% to <30% less than the maximum labeled annual application rate	1	
	Any application 30% to <60% less than the maximum labeled annual application rate	2	
	Any application ≥60% less than the maximum labeled annual application rate	3	
Reduction in Proportion of Field Treated [Select one]	10 to <30% of Field Area NOT treated (Banded application, partial treatment, precision sprayers)	2	
	30 to <60% of Field Area NOT treated (Banded application, partial treatment, precision sprayers)	3	
	≥60% of Field Area NOT treated (Banded application, partial treatment, precision sprayers)	4	
Soil Incorporation	Watering-in or mechanical incorporation before a runoff producing event	1	
	TOTAL MITIGATION POINTS SCORE:		

[1] EPA's mitigation menu and measure descriptions specific to pesticides are available in the following websites: https://www.epa.gov/pesticides/mitigation-menu and https://www.epa.gov/pesticides/menu-measure-descriptions. If the state has a more restrictive requirement, that must be followed instead. Not all measures are applicable to all fields and crops.
[2] Only one of the measures that qualify from a 'mitigation menu item' can be used. For example, a user could get mitigation points for cover cropping or double cropping but not both.
[3] Multiple field characteristics may apply to an individual field.
[4] Soil texture is as defined by USDA's soil classification system. See USDA's Web Soil Survey tool to determine soil texture: https://websoilsurvey.nrcs.usda.gov/app/.
[5] Adjacent to the field mitigations should be located downgradient from a treated field to effectively reduce pesticide exposure in runoff and erosion.
[6] For example, if a cover cropping and adjacent to the field VFS are both utilized, the efficacy of the mitigation measures in combination may be increased.

https://www.epa.gov/system/files/documents/2025-06/runoff-mitigation-worksheet-april-2025.pdf

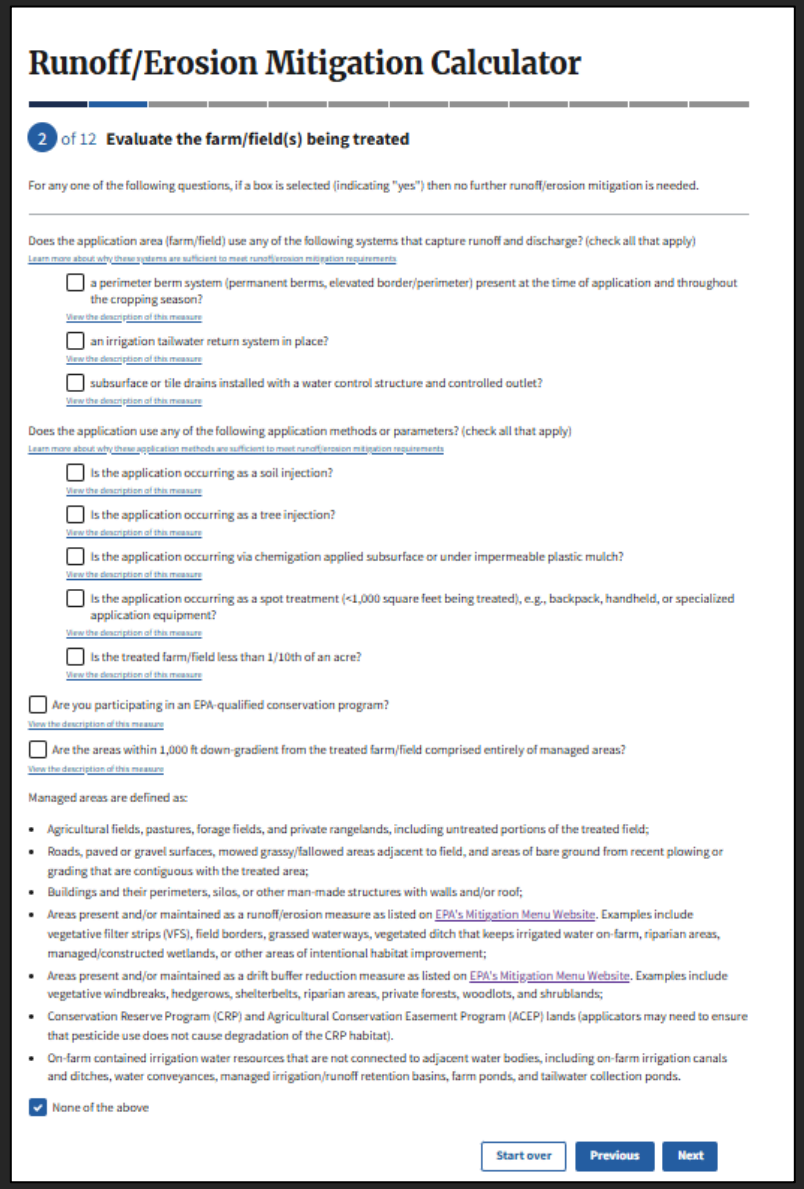
PALM App



Mobile friendly!

https://www.epa.gov/pesticides/pesticide-app-label-mitigations

Runoff/Erosion Mitigation Calculation



Runoff/Erosion Mitigation Calculator

2 of 12 **Evaluate the farm/field(s) being treated**

For any one of the following questions, if a box is selected (indicating "yes") then no further runoff/erosion mitigation is needed.

Does the application area (farm/field) use any of the following systems that capture runoff and discharge? (check all that apply)

Learn more about why these systems are sufficient to meet runoff/erosion mitigation requirements

- ☐ a perimeter berm system (permanent berms, elevated border/perimeter) present at the time of application and throughout the cropping season?
  View the description of this measure
- ☐ an irrigation tailwater return system in place?
  View the description of this measure
- ☐ subsurface or tile drains installed with a water control structure and controlled outlet?
  View the description of this measure

Does the application use any of the following application methods or parameters? (check all that apply)

Learn more about why these application methods are sufficient to meet runoff/erosion mitigation requirements

- ☐ Is the application occurring as a soil injection?
  View the description of this measure
- ☐ Is the application occurring as a tree injection?
  View the description of this measure
- ☐ Is the application occurring via chemigation applied subsurface or under impermeable plastic mulch?
  View the description of this measure
- ☐ Is the application occurring as a spot treatment (<1,000 square feet being treated), e.g., backpack, handheld, or specialized application equipment?
  View the description of this measure
- ☐ Is the treated farm/field less than 1/10th of an acre?
  View the description of this measure

☐ Are you participating in an EPA-qualified conservation program?
View the description of this measure

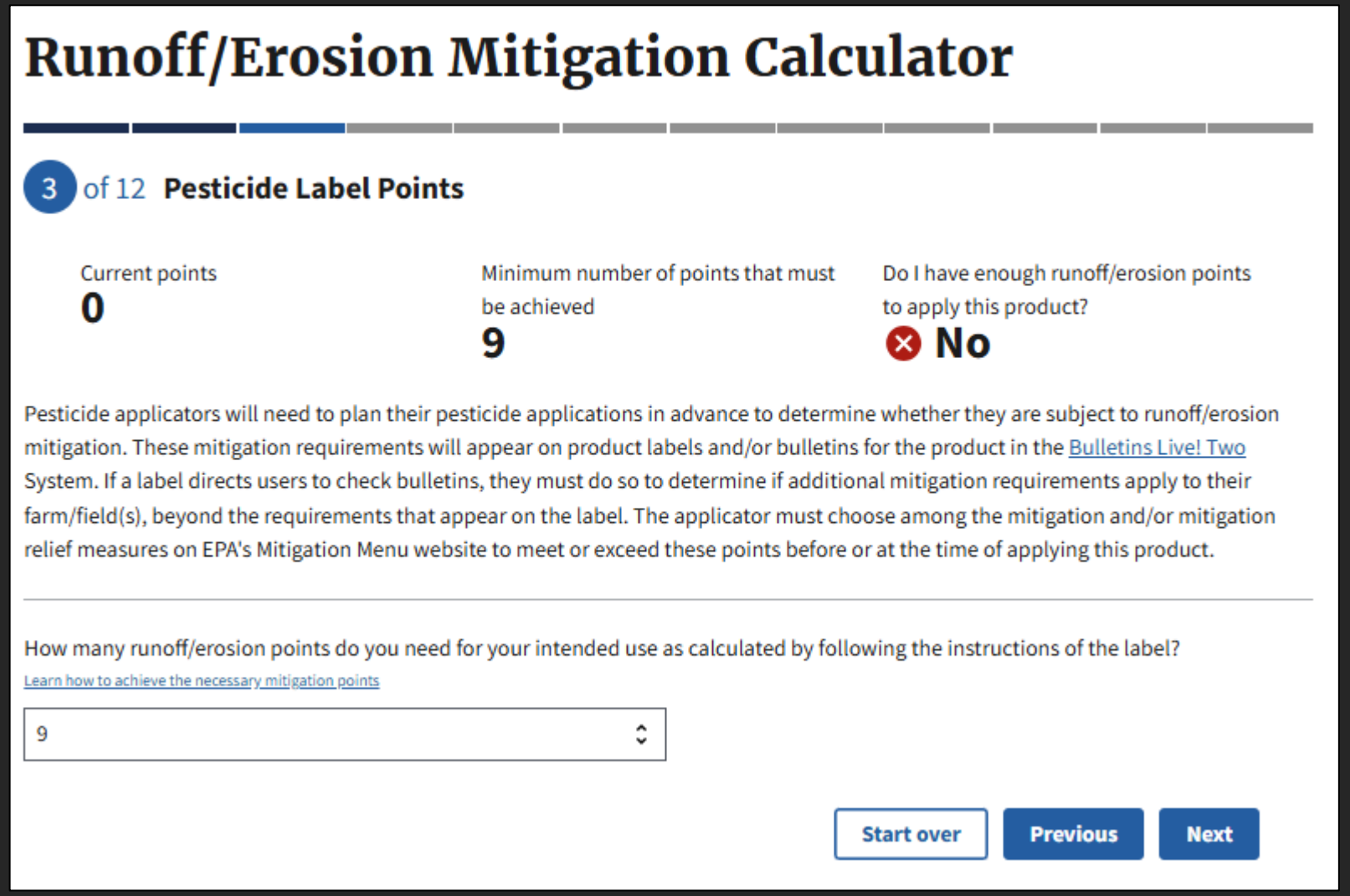
☐ Are the areas within 1,000 ft down-gradient from the treated farm/field comprised entirely of managed areas?
View the description of this measure

Managed areas are defined as:

- Agricultural fields, pastures, forage fields, and private rangelands, including untreated portions of the treated field;
- Roads, paved or gravel surfaces, mowed grassy/fallowed areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated area;
- Buildings and their perimeters, silos, or other man-made structures with walls and/or roof;
- Areas present and/or maintained as a runoff/erosion measure as listed on EPA's Mitigation Menu Website. Examples include vegetative filter strips (VFS), field borders, grassed waterways, vegetated ditch that keeps irrigated water on-farm, riparian areas, managed/constructed wetlands, or other areas of intentional habitat improvement;
- Areas present and/or maintained as a drift buffer reduction measure as listed on EPA's Mitigation Menu Website. Examples include vegetative windbreaks, hedgerows, shelterbelts, riparian areas, private forests, woodlots, and shrublands;
- Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) lands (applicators may need to ensure that pesticide use does not cause degradation of the CRP habitat).
- On-farm contained irrigation water resources that are not connected to adjacent water bodies, including on-farm irrigation canals and ditches, water conveyances, managed irrigation/runoff retention basins, farm ponds, and tailwater collection ponds.

☑ None of the above

Start over | Previous | Next



Runoff/Erosion Mitigation Calculator

3 of 12 **Pesticide Label Points**

Current points	Minimum number of points that must be achieved	Do I have enough runoff/erosion points to apply this product?
0	**9**	✕ **No**

Pesticide applicators will need to plan their pesticide applications in advance to determine whether they are subject to runoff/erosion mitigation. These mitigation requirements will appear on product labels and/or bulletins for the product in the Bulletins Live! Two System. If a label directs users to check bulletins, they must do so to determine if additional mitigation requirements apply to their farm/field(s), beyond the requirements that appear on the label. The applicator must choose among the mitigation and/or mitigation relief measures on EPA's Mitigation Menu website to meet or exceed these points before or at the time of applying this product.

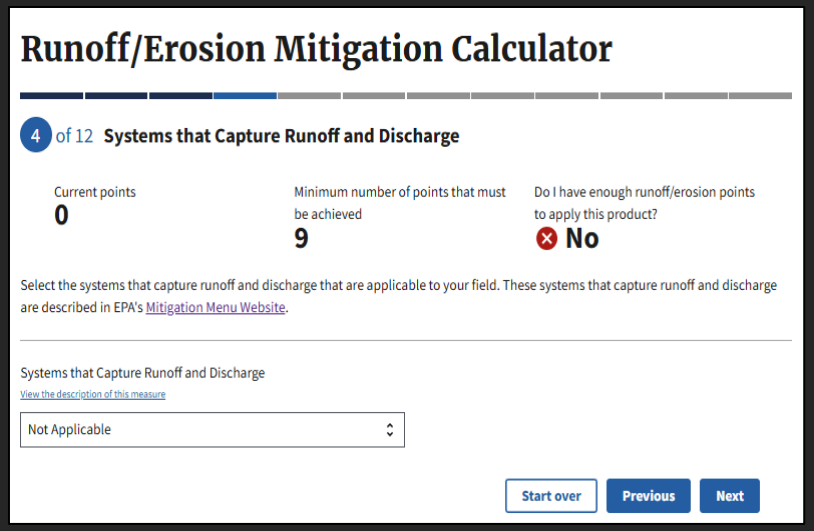
How many runoff/erosion points do you need for your intended use as calculated by following the instructions of the label?

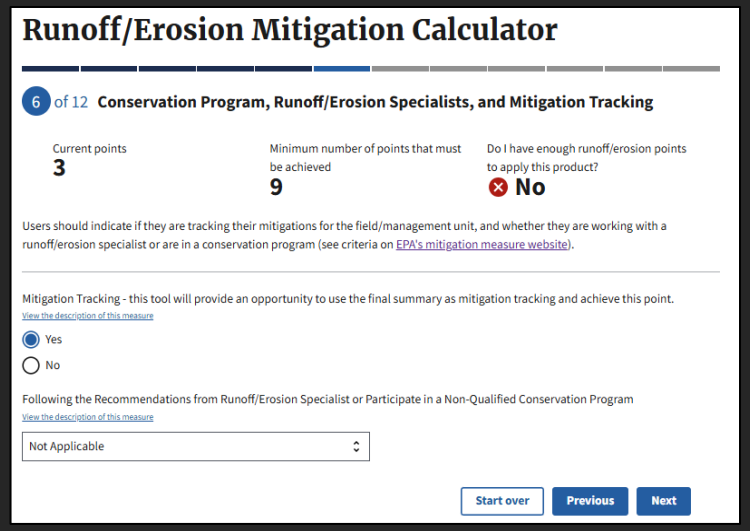
Learn how to achieve the necessary mitigation points

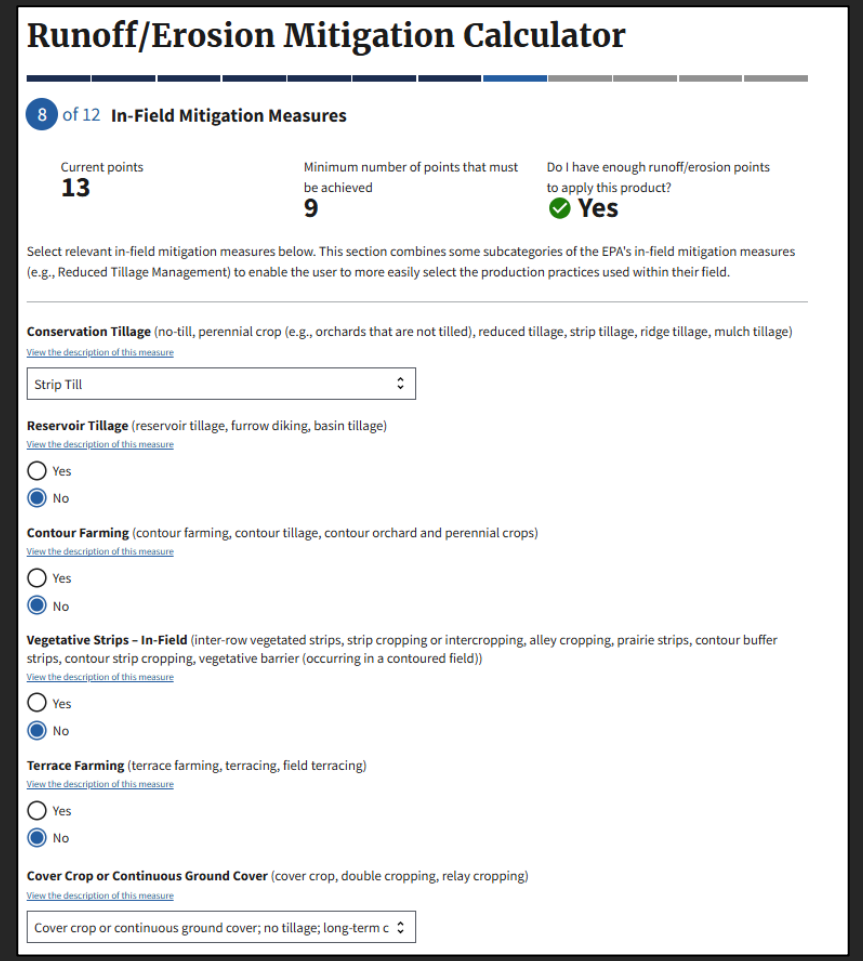
9

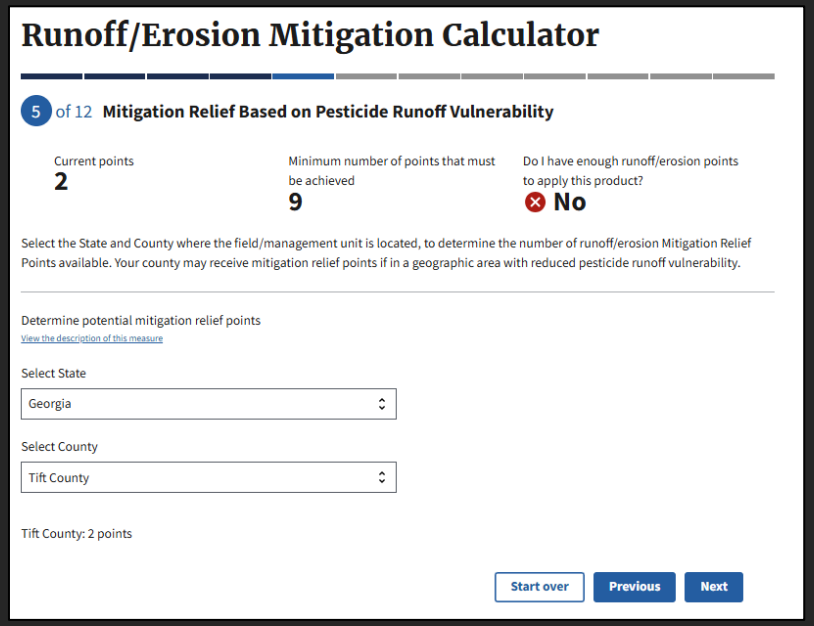
Start over | Previous | Next

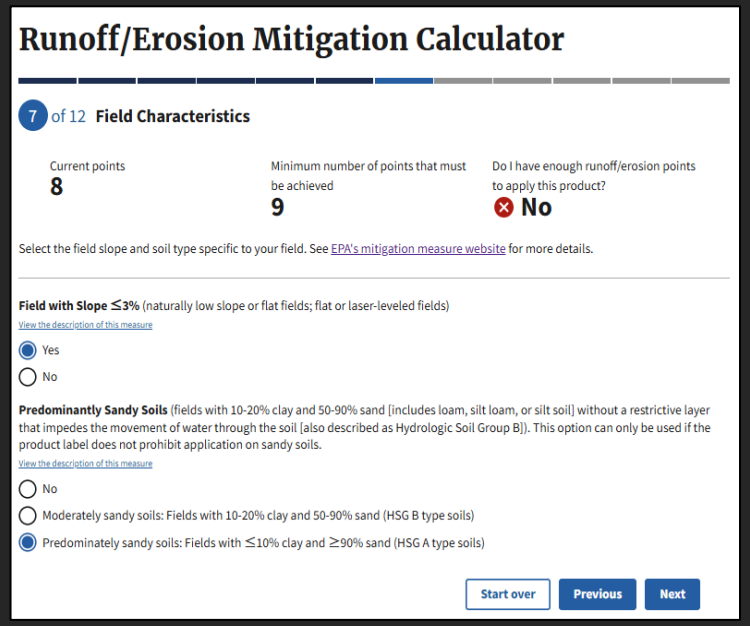
Runoff/Erosion Mitigation Calculation











Runoff/Erosion Mitigation Calculation

Runoff/Erosion Mitigation Calculator

12 of 12 **Resulting Mitigation Points**

Current points	Minimum number of points that must be achieved	Do I have enough runoff/erosion points to apply this product?
13	**9**	**Yes**

The results of this runoff/erosion portion of the application are presented in the "Points Summary" below. This summary includes the number of points required by the label, any mitigation relief points, and the final number of points achieved.

When appropriate, this summary will also indicate if the user inputs have resulted in their field meeting the erosion/mitigation runoff mitigation requirements.

When you are using more than one pesticide, you are required to comply with the most restrictive requirements across product labels used in the application and any applicable bulletins. Restrictions may include achieving a minimum number of runoff/erosion mitigation points (for which you would use this calculator), but could also be other restrictions (e.g., use prohibition, timing restriction, application method prohibition, sandy soil application restriction, subset of menu measures).

This summary below will meet the requirements for achieving the point for Mitigation Tracking. Printing or saving this summary serves as documentation of using this tracking application.

Date created: December 1, 2025, application version 0.1.1.

EPA

Points Summary

- For field ID: N/A
- Product information: N/A
- Crop/use site: N/A
- Required number of points calculated from your selected pesticide label: **9**
- Mitigation relief points based on your field location: **2**
- Remaining number of points needed to be achieved through mitigation measures: **7**
- Points achieved based on field and application parameters: **13**
- Extra point achieved for using mitigation measures from multiple categories: **0**
- Field meets the runoff/erosion mitigation requirements: **Yes!**

Your Selected Mitigation Measures

- Select County
  - Georgia, Tift County (2 points)
- Mitigation Tracking - this tool will provide an opportunity to use the final summary as mitigation tracking and achieve this point.
  - Yes (1 point)
- Field with Slope ≤3% (naturally low slope or flat fields; flat or laser-leveled fields)
  - Yes (2 points)
- Predominantly Sandy Soils (fields with 10-20% clay and 50-90% sand [includes loam, silt loam, or silt soil] without a restrictive layer that impedes the movement of water through the soil [also described as Hydrologic Soil Group B]). This option can only be used if the product label does not prohibit application on sandy soils.
  - Predominately sandy soils: Fields with ≤10% clay and ≥90% sand (HSG A type soils) (3 points)
- Conservation Tillage (no-till, perennial crop (e.g., orchards that are not tilled), reduced tillage, strip tillage, ridge tillage, mulch tillage)
  - Strip Till (2 points)
- Cover Crop or Continuous Ground Cover (cover crop, double cropping, relay cropping)
  - Cover crop or continuous ground cover; no tillage; long-term cover crop (3 points)

If I Need More Points On My Field, What Mitigations Could I Do To Achieve Additional Points?

View remaining mitigations

Print | Start over | Previous | Continue to calculate spray drift (optional)

How to Prepare

- Review definitions of mitigation menu options
- Read through labels with new mitigation language
- Practice navigating BLT if not comfortable – generate bulletins
- Bookmark and practice with calculator of choice – either excel or web app
- IF COMFORTABLE, feel free to make your own worksheet?

Tailored to Your Specific County?

Agronomic Crops in Georgia – Runoff Mitigation Measures – 2025

Mitigation	Points
Mitigation relief points	
Field with ≤ 3% slope	
Sand, loamy sand or sandy loam	
Cover crops	
Strip-till production	
Non-irrigated lands	
Incorporation (center pivot or tillage)	
Grass waterway	
Terraces	
Field border of vegetation	
Mitigation tracking	

ESA Runoff Mitigation Measures 2025
(Tilled Ground – Center Pivot Irrigation - Vegetables)

Mitigation	Points
Mitigation relief points	
Field with ≤ 3% slope	
Sand, loamy sand or sandy loam (no hard pan)	
Incorporation (irrigation/tillage)	
Terraces	
Grass waterway	
Vegetated ditch	
Adjacent field border	
Mitigation tracking	

ESA Runoff Mitigation Measures 2025
(Raised Bed Plasticulture - Vegetables)

Mitigation	Points
Mitigation relief points	
Field with ≤ 3% slope	
Sand, loamy sand or sandy loam (no hard pan)	
Irrigation water management	
Cover crops	
Grass waterway	
Vegetated ditch	
Adjacent field border	
Mitigation tracking	

Resources

	Webpage Link
Pesticide App for Label Mitigations (PALM)	https://www.epa.gov/pesticides/pesticide-app-label-mitigations
Spray Drift – PDF Worksheet	https://www.epa.gov/system/files/documents/2025-06/spray-drift-mitigation-worksheet-april-2025-v2.pdf
Runoff/Erosion Calculation – PDF Worksheet	https://www.epa.gov/system/files/documents/2025-06/runoff-mitigation-worksheet-april-2025.pdf
Excel calculator (direct download)	https://www.epa.gov/system/files/documents/2025-04/spray-drift-and-runoff-mitigation-calculator-tools-v.2.0_1.xlsm
UGA Extension BLT Publication	https://fieldreport.caes.uga.edu/publications/C1347/locate-pesticide-use-limitation-areas-pulas-using-the-epas-bulletins-live-two-website/
CLA Adapting to ESA – Mitigation overview	https://www.youtube.com/watch?v=BWlgBhgephY&list=PLGqU0DXokVsQdGZkr6XhAJluBPEcYsMJ9
CLA Adapting to ESA – BLT	https://youtu.be/_ayFOsYQCLs?si=Wa_-dHkrg4TWK2dJ
CLA Adapting to ESA – Spray Drift	https://youtu.be/V_sM0Q9s2Ho?si=ODokKbsmWWP6BQNn
CLA Adapting to ESA – Runoff	https://youtu.be/2CpXDR23PHw?si=vT2uVaMa9cMWVt08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Call anytime with questions!