

Increasing Understanding of EPA's Endangered Species Protection Program Mitigation Measures on Maryland's Eastern Shore

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Introduction

- In an effort to address concerns related to the impact of pesticides on threatened or endangered species and in response to ongoing litigation, the Environmental Protection Agency (EPA) has developed the Bulletins Live! Two (BLIT) website, and pesticide mitigation strategies.
- The BLIT website is an online tool that can be used to identify geographically specific pesticide use limitation areas (PULA's) (Fig. 1), where additional pesticide use limitations steps are needed to protect federally threatened or endangered listed species or their habitat.
- Rather than creating broad area-wide restrictions, the EPA has created a mitigation system that can be configured based on the site location, pesticide product, and application month. While this flexibility offers applicators the opportunity to continue to use most pesticides, it has led to some confusion regarding which mitigation menus, and measures to use and when.
- In order to reduce farmer, landowner, and applicator confusion and stress around these new measures, several presentations were given at University of Maryland Extension (UME) winter pesticide recertification classes and winter production meetings on the Maryland Eastern Shore.



Fig 1.) Bulletins Live! Two maps indicating the pesticide use limitation areas (PULA'S) in pink on the Eastern Shore of Maryland as of March 2026.

Program Overview

- Several presentations were developed and given at various UME winter pesticide recertification classes and winter crop production meetings on the Eastern Shore of Maryland.
- Presentation length varied from 15 minutes to 1 hour with a hands-on demo and activity.
- The goals of the program were to:
 - Increased understanding of the new requirements that will appear on pesticide labels (Fig 2).
 - Increased understanding of how to use the BLIT website to check for PULA on farms, access Bulletins, and determine what additional measures are needed.
 - Increased understanding of the different pesticide mitigation measures and where to find the mitigation measures list (Fig 3, 4).
 - To provide support on how to plan for pesticide application with these new requirements to reduce time and stress (Fig 5).

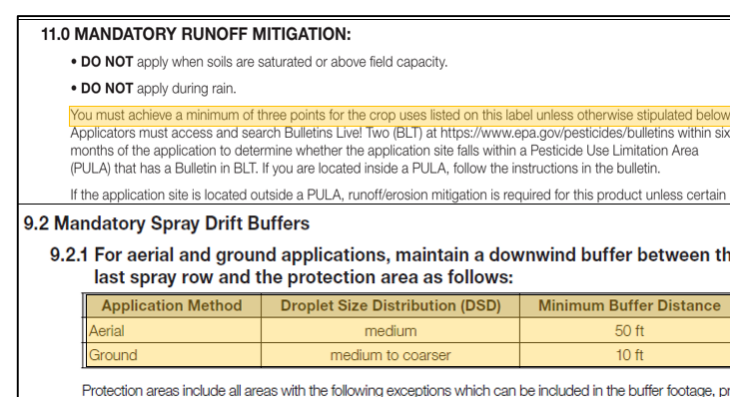


Fig. 2) Examples of updated pesticide labels with runoff/erosion mitigation menu point and spray drift buffer requirements highlighted.

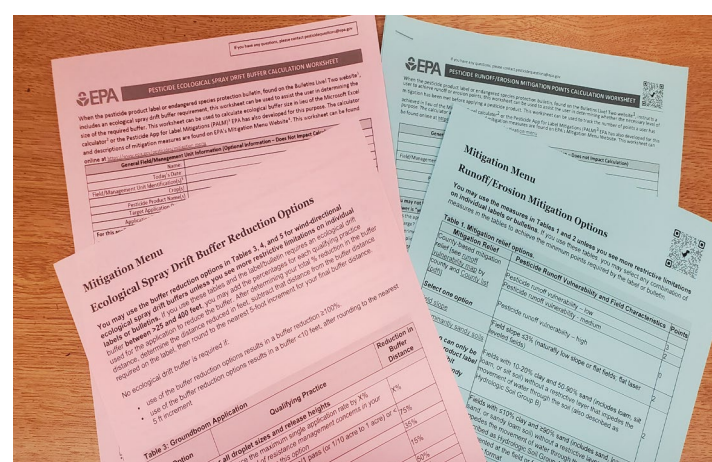


Fig 3.) Participants were given color-coded copies of the EPA mitigation menu options and calculation worksheets. The different colors were used to reiterate that these are two different mitigation measures.

Mitigation Measure	Points	Mitigation Measure	Points
Field with slope <3%	2	Cover Crop/Continuous ground cover: with tillage	1
Predominantly sandy soils (sandy loam or loamy sand)	2-3	Cover crop/continuous ground cover, no tillage; short-term cover crop	2
Conservation Tillage (30% cover)	2-3	Cover crop/continuous ground cover, no tillage; long-term cover crop	3
Vegetated drainage ditch	1	Non-irrigated lands	3
Riparian area (20 ft)	1-3		
Field Border of vegetation (20 ft=1 pt)	1-3	Soil Incorporation - Watering-in or mechanical incorporation before a runoff producing event	1
Participating in a conservation program	2	Mitigation Tracking	1

Fig 4.) The above chart lists common growing practices on the eastern shore of Maryland that are part of the EPA's Runoff/Erosion Mitigation Measures, along with their point value. This chart allows farmers and applicators to quickly see how many migration points their farms and fields have. If they know their "baseline points", then they don't need to worry about selecting additional measures unless the pesticide label requires more points.

Planning Pesticide Application

1. Check BLIT- Any field that falls within a PULA will need to follow the measure listed on the bulletin based on chemical and time of year.
2. For Fields Outside PULA's: What crop is being grown? What pesticide are you likely going to be using? *Can you group any of your fields?*
3. Do any of those pesticide labels or bulletins specify that runoff/erosion mitigation points or spray drift buffer need to be achieved? **Answer No – Stop Here.**
4. Evaluate Fields/Farm
 - Do any of your fields/farms meet any of the EPA's "do not have to implement " exceptions? **Answer Yes – Stop Here.**
 - **Answer No** – then you need to determine which pesticide applications need mitigation points or drift buffers
 - What is the maximum point needed? Your maximum spray buffer needed?
5. EPA Mitigation Menu
 - Subtract points or buffer % for existing mitigation measures or managed areas
 - Select additional measures as needed

Figure. 5) The above is a flowchart-like list created to help walk farmers and applicators through the steps that can be done during the winter to help plan for future pesticide application.

Outcomes

- 7 presentations were given in person at the winter pesticide recertification class and winter production meetings on the Maryland Eastern Shore, to ~230 participants
- 1 Virtual training was given as part of the UME IPM web series. It had 15 participants, and the YouTube Recording has been viewed ~40 times since November 2025.
- 3 Farmer have asked for assistance with looking up fields and planning their 2026 sprays.
- When asked at the end of two pesticide recertification classes, ~75% of participants said they had a better understanding of the new regulations, and ~70% were less stressed about the update to labels than before.