

Issues Identified with Bulletins Live! Two SFIREG ESI Committee, December 3, 2024

Summary:

EPA directs pesticide applicators who apply pesticides containing label language with Endangered and Threatened Species Protection Requirements to access endangered species protection bulletins through an online portal called Bulletins Live! Two (BLT) within 6 months prior to or on the day of application. Applicators must follow all directions and restrictions contained in any applicable Bulletin for the area where they are applying the product, including any restrictions on application timing if applicable. Numerous issues have been identified with the process that EPA has developed, such as accessibility, useability, and clarity. Importantly, BLT also does not appear to meet Web Content Accessibility Guidelines for the Americans with Disabilities Act (ADA) compliance. The purpose of this white paper is to provide additional details about these challenges and recommend changes that should be implemented to make the process effective and useable for applicators and state lead agencies (SLAs).

Current Process:

Labels of pesticides that have been evaluated according to the Endangered Species Act contain verbiage identical or similar to this:

“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 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.”

Applicators must access endangered species bulletins via an online process, interpret the restrictions which apply to their application situation outlined in the bulletins, and implement the requirements within 6 months prior to or on the day of application. Endangered species bulletins are considered extensions of the pesticide label, and therefore requirements are considered enforceable. Applicators are not required to maintain copies of bulletins that they have accessed or records of actions taken in response to bulletin requirements (such as spray drift or runoff mitigation measures).

Issues Identified with Process:

1. Accessibility for Applicators.

Despite being a label requirement, many applicators are unable to access or navigate BLT due to barriers from lack of ADA compliance, poor internet availability, personal beliefs, or technology challenges. Since there is no recordkeeping requirement, SLAs must also trust that this information has been accessed. Ease of accessibility is necessary to get applicators to consult endangered species bulletins in the absence of an enforceable component of this requirement.

BLT does not appear to meet Web Content Accessibility Guidelines for ADA compliance. The way that BLT is designed and set up can create barriers that make it difficult or impossible for people with disabilities to use the program. People with limited vision or color blindness cannot differentiate PULA locations if there is not enough contrast between overlapping PULA borders. Similarly, the changing color of the “Printable Bulletin” button in the upper right corner does not effectively communicate the presence of a bulletin. Barriers to information input and output may also exist in the current design of the program.

Many states (WA, NE, PA, FL, NC, SD, OR, VT others...) have expressed concerns about lack of internet connectivity in areas of their states. US Census data from 2017-2022 shows that 21% of American producers do not have adequate internet access to reliably access this information. Mobile device accessibility is equally unreliable. Applicators who do not have adequate internet access will likely not be able to obtain endangered species bulletins, and SLAs have limited ability to verify that bulletins were accessed due to the lack of recordkeeping requirements.

Even with internet access, technologically challenged applicators have a difficult time navigating the BLT system. Training is needed for those who do not understand or feel comfortable enough to be confident that they are accessing the correct information and understanding requirements on endangered species bulletins. The average age of the American farmer is approximately 57. While age is not tied to digital literacy, generally older generations struggle with digital technology more than younger ones. Similar to applicators with limited or no connectivity, applicators who do not understand how to use the technology will likely give up in their efforts to obtain endangered species bulletins, and SLAs have limited ability to verify that bulletins were accessed due to the lack of recordkeeping requirements.

Some growers hold personal beliefs about using technology that will limit how those applicators will be able to access endangered species bulletins. Other growers are limited by English proficiency. These applicators need a way to request endangered species bulletins offline, as well as resources to contact for assistance with understanding and implementing bulletin requirements.

The agency has expressed optimism in the possibility of allowing access to the underlying data used to generate endangered species bulletins. Making this data available for other groups to use to develop tools to assist applicators and SLAs would take advantage of resources that are not available to the agency. The agency has stated that limitations in resources will result in delays in implementing needed improvements in the BLT system. There are multiple third-party entities (commodity groups, agricultural technology providers, farm cooperatives) that have the resources and the motivation to take the information from the Bulletins and make it more accessible and useable for pesticide applicators and SLAs.

Recommendations:

- The SFIREG ESI committee recommends that the agency ensure that the BLT system is brought into full compliance with the ADA.
- The SFIREG ESI committee recommends that the agency develop a process to ensure that all applicators have ready access to endangered species bulletins, regardless of internet connectivity. EPA should explore digital access research that has been conducted to determine options for access to the bulletins for those who live with low or no digital access.
- The SFIREG ESI committee recommends that the agency allow 3rd-party access to the underlying data used to create endangered species bulletins. Resource restrictions have been cited multiple times as a limiting element to improving the user experience in BLT. Making this data available for other groups to use to develop tools to assist applicators and SLAs would take advantage of resources that are not available to the agency and improve adoption and compliance with the bulletin restrictions.

2. Need for improved bulletin language and format

The current format and language used in many endangered species bulletins makes it difficult to adequately determine requirements for both applicators and SLAs. Improved readability is needed to ensure applicators understand requirements. In many cases, SLAs would have a difficult time determining appropriate requirements when trying to verify if a grower is in compliance. Long blocks of text must be replaced with more concise, itemized and user-friendly formatting to meet ADA requirements and ensure complexity does not cause applicators to abandon attempts to comply.

An example of confusing format is included below:

Diazinon AG600 Bulletin Language

Code	Limitation
RPMZ	Do not apply this product when soil is saturated, or when a storm event is likely to produce runoff from the treated area is forecasted (by NOAA/National Weather Service, or other similar forecasting service) to occur within 48 hours following application. Do not apply this product when: wind speeds exceed 10 mph when applying the product via airblast, or wind speeds exceed 15 mph when applying via ground boom or other methods. Do not apply this product when tank mixing with other neurotoxic pesticides (i.e., organophosphate, carbamate, pyrethroid, and neonicotinoid pesticides) at application rates that exceed 50 percent the maximum labeled rate of any pesticide active ingredient used in the tank mixture.
OTF25	For this mitigation measure, salmonid habitat (referred to below as "fish habitat") is defined as surface waters accessible to salmon, including but not limited to lakes, reservoirs, rivers, streams, inundated floodplains, wetlands or natural ponds, estuaries, and marine near-shore areas. When determining buffer distances, measure from the ordinary high-water mark for rivers, streams, lakes, and tidally-influenced waters. For flooded habitats (inundated floodplains, e.g., Yolo Bypass), measure from the edge of the inundated area. For applications of diazinon, the required number of runoff mitigation points varies based upon the application rate and soil incorporation depth. Each application at a rate >1.5 to 2.5 (lbs a.i./Acre) with a soil incorporation depth between 0 to 1 inches requires 80 runoff mitigation points, while a soil incorporation depth >1 to 3 inches requires 50 runoff mitigation points, soil incorporation depth >3 to 7 inches requires 30 runoff mitigation points, and soil incorporation depth >7 inches requires 25 runoff mitigation points. Each application at a rate >0.5 to 1.5 (lbs a.i./Acre) with a soil incorporation depth between 0 to 1 inches requires 50 runoff mitigation points, while a soil incorporation depth >1 to 3 inches requires 30 runoff mitigation points, soil incorporation depth >3 to 7 inches requires 25 runoff mitigation points, and soil incorporation depth >7 inches requires 20 runoff mitigation points. Each application at a rate ≤0.5 (lbs a.i./Acre) with a soil incorporation depth between 0 to 3 inches requires 25 runoff mitigation points, while a soil incorporation depth >3 to 5 inches requires 20 runoff mitigation points, and soil incorporation depth >5 inches requires 15 runoff mitigation points. How to determine the points necessary for selecting the correct mitigation: Step 1. Determine the number of runoff mitigation points needed for your pesticide application. To do this, simply determine the "Mitigation Points Required" based on your application method and rate. Step 2. Click the link https://www.epa.gov/endangered-species/drift-and-runoff-reduction-measures-and-associated-points and choose mitigation options from the table that provide an equal or greater value of points for runoff. Mitigation options can be added together, based on their point values.

Recommendations:

- The SFIREG ESI committee recommends that the agency work directly with SLAs, PSEP's and/or state wildlife agencies when designing bulletins to ensure that they are ADA compliant, understandable, usable and that restrictions make sense for individual states. A suggestion would be the formation of a workgroup of coregulators to give SLAs the opportunity to review the language to be used in the Bulletins so that confusing or unclear language can be avoided.

3. Ability for SLAs to access historic BLT information

As more pesticide products are added to the BLT system, SLAs will have a greater need to access historic bulletins for research and inspection/investigation purposes. Currently, EPA will provide this historic information if requested. However, as more information is placed in BLT and as more states begin to attempt to enforce restrictions placed on bulletins, SLAs will need more access.

SLAs will often encounter investigation and inspection situations where they will need to confirm if past bulletin restrictions have been met. Many times, that information will need to be reviewed prior to meeting with regulated stakeholders as part of an investigation or inspection. Additionally, SLAs will be asked to discuss past restrictions during meetings/phone calls/talks with industry/etc. Timeliness in obtaining this information is critical in ensuring that SLA objectives are met, and resources are not wasted.

Recommendations:

- The SFIREG ESI committee recommends that the agency develop a process within or outside of BLT that SLAs can access to obtain historic bulletin information.

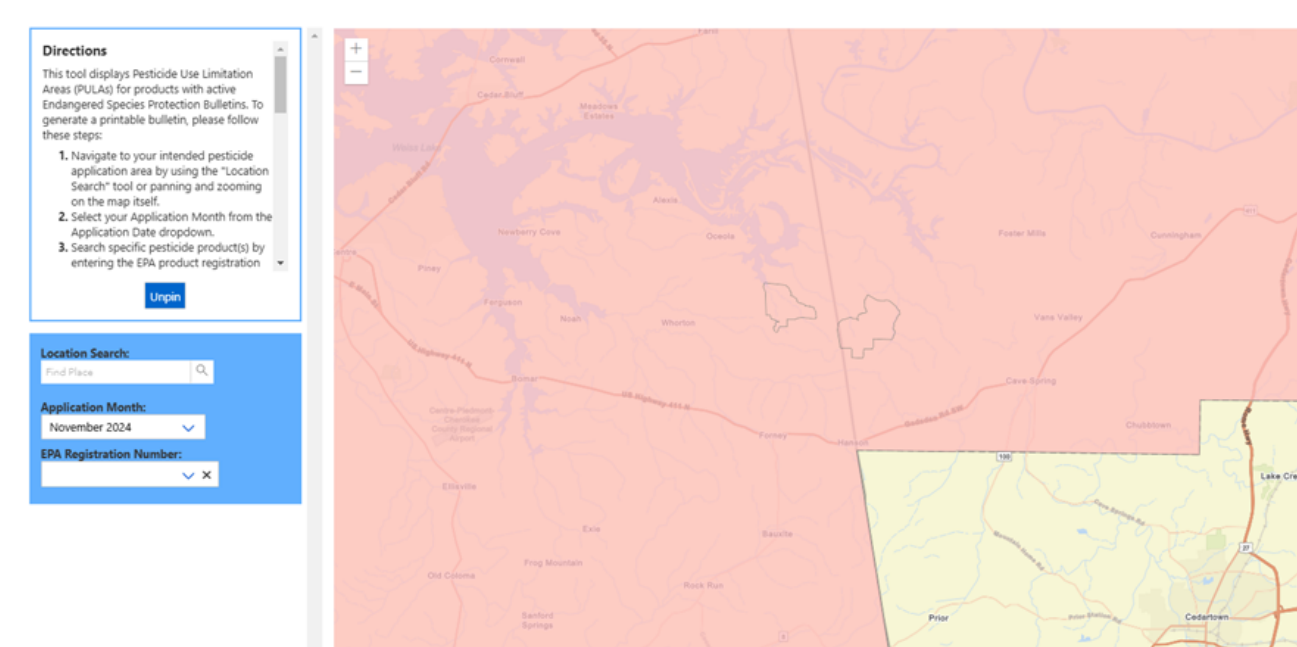
4. PULA Clarity

Users of BLT rely on the clarity of information contained in the program to make the correct decisions when interpreting PULA requirements. Applicators obtain PULA information in various ways in BLT, including utilizing the map view to locate their fields within the BLT system. Requirements and PULA maps must be very clear for SLAs to be able to enforce these requirements.

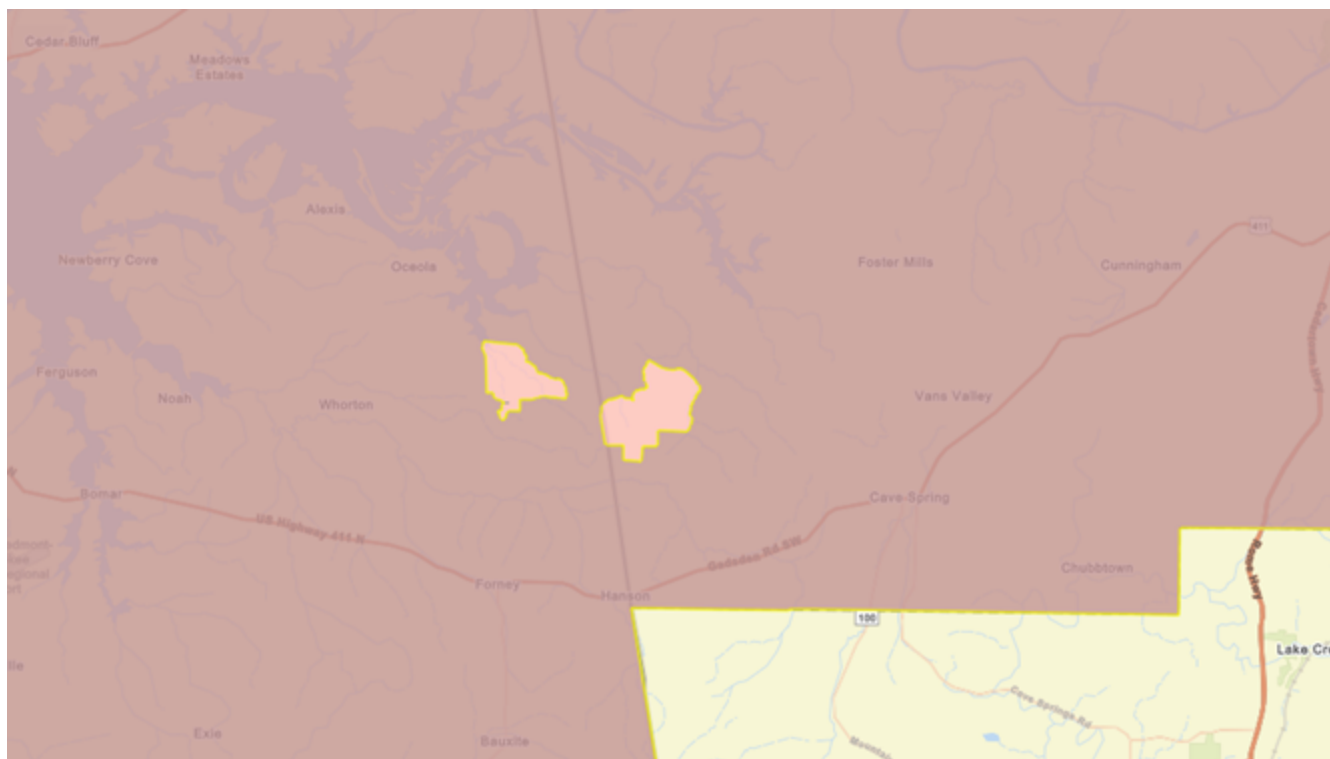
In many cases, it is difficult for growers to discern where PULA boundaries exist, and which products are selected for bulletin printing. Overlapping PULAs will only get more difficult to navigate as more products are added to BLT. Search parameters and PULA boundaries/layers need to be enhanced to decrease complexity and provide SLAs and growers with the ability to clearly identify requirements.

Iowa Department of Agriculture and Land Stewardship provided the following example to illustrate the difficulty applicators and SLAs face with the current BLT system:

Applicators/SLAs relying on the map view to search for a PULA in their area see only one visible pink shaded area. However, multiple PULAs exist within this area. This is an example of looking for the limitations associated with Liberty Ultra Herbicide, EPA Reg. No. 7969-500.



First Issue: Clicking anywhere in the pink shaded area causes two smaller PULAs to show up, but unless you know what to click on, it is difficult to see that there are two different PULAs. See the images above and below.



Second Issue: When clicking on the smaller PULAs, the summary of “Limitations for Selected Area” includes Dicamba – 2020, Enlist 2023 and Glufosinate 2024. If the applicator doesn’t know that there is a need to click on the “Enlist 2023 and Glufosinate 2024” verbiage at the top of this area, it would appear that there are no limitations for Liberty Ultra Herbicide within this PULA. See the image below.

Unpin

Limitations for Selected Area

Dicamba - 2020

Enlist 2023 and Glufosinate 2024

Pula ID: 52

Event Name: Dicamba - 2020

Application Month: November 2024

Product	Count
A21472 PLUS VAPORGRIP TECHNOLOGY (100-1623) Alternate Names: TAVIUM PLUS VAPORGRIP TECHNOLOGY	1
ENGENIA HERBICIDE (7969-472)	1
FEXAPAN PLUS VAPORGRIP TECHNOLOGY (352-938)	1
TAVIUM PLUS VAPORGRIP TECHNOLOGY (100-1623) Alternate Names: TAVIUM PLUS VAPORGRIP TECHNOLOGY	1
XTENDIMAX WITH VAPORGRIP TECHNOLOGY (264-1210) Alternate Names: M1768 Herbicide	1

Full Details

Clear Selected

Third issue: The product name shows up as “BASF L-Glufosinate-Ammonium 211 Herbicide (7969-500)” instead of the alternate brand name “Liberty Ultra Herbicide” within the listed “Limitations for Selected Area” as well as the printable bulletin. Applicators may not interpret this product as having limitations if the brand name does not match the product that they have in hand. See the image below.

Limitations for Selected Area

Dicamba - 2020

Enlist 2023 and Glufosinate 2024

Pula ID: 89

Event Name: Enlist 2023 and Glufosinate 2024

Application Month: November 2024

Product	Count
BASF L-Glufosinate-Ammonium 211 Herbicide (7969-500)	1
ENLIST DUO (62719-649) Inactive Names: GF-2726	1
GF-3335 (62719-695) Alternate Names: ENLIST ONE	1
L-glufosinate Liquid Formulation (86203-33)	1

Full Details

Clear Selected

Applicators relying on the map view to locate the bulletin will struggle to obtain the correct information when multiple PULAs are in place for areas of application. The directions on the BLT website state that “A yellow border surrounding the PULA indicates that it has been selected.” That is not the case if there are multiple bulletins. Each of these PULA areas have a yellow border, so the ability to differentiate between PULAs will be

confusing. As more PULAs are added to the BLT system, it will become more difficult for applicators and SLAs to determine if they are referencing the correct PULA information.

Additionally, the absence of alternative brand names will cause confusion among applicators and SLAs. Applicators will reference the “Limitations for Selected Area” portion of BLT or the printed bulletin to determine what limitations are required for the product that they have in their hand to apply. If they do not see the name of their product, they will likely erroneously determine that these limitations do not apply to the application of that product.

Recommendations:

- The SFIREG ESI committee recommends that the agency develop a different method to differentiate overlap between PULA boundaries. PULA boundaries need to be clearly defined and delineated on maps generated by BLT for SLAs to be able to enforce PULA requirements.
- The SFIREG ESI committee recommends that the agency develop a process to indicate other brand names of products or include alternate brand names on the “Limitations for Selected Area” list as well as the printed endangered species bulletins. SLAs will find it difficult to enforce PULA requirements if applicators are not able to determine if the product they are applying actually has pesticide use limitations.

5. Clarity / Complexity Improvements which would decrease user error

BLT currently allows applicators to search for field locations using street address, GPS coordinates, and crossroads near the field to be sprayed. In many areas of the country, farmers identify fields according to the legal description (the section-township-range number for a specific location; see the Public Land Survey System or PLSS (https://en.wikipedia.org/wiki/Public_Land_Survey_System) for more information). Adding the nationwide GIS layer for the PLSS to BLT would allow the ability to search by this feature and would provide an additional method for applicators to more easily find their application areas.

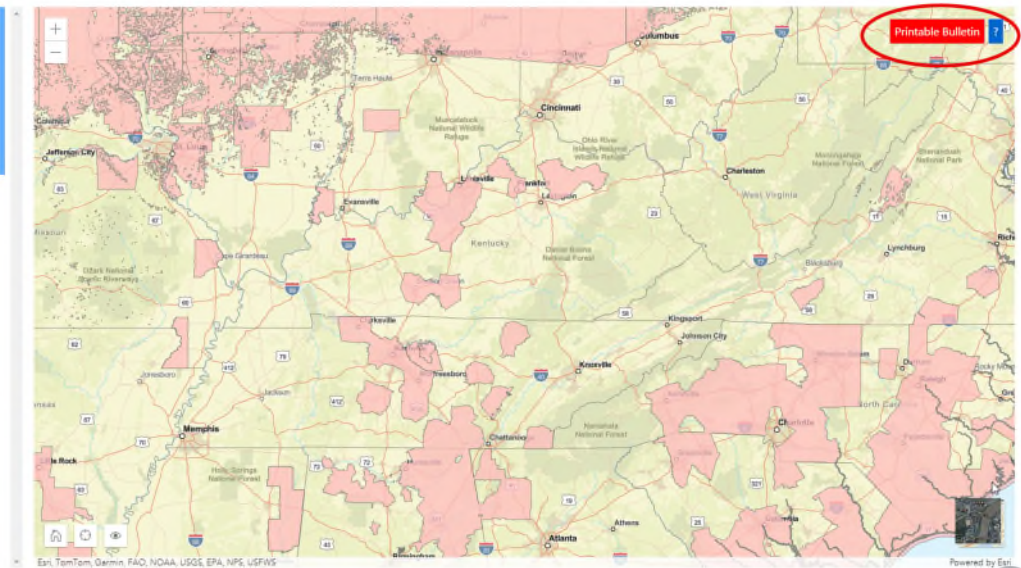
Applicators attempting to determine if an application area is within a PULA must click on the map within a PULA area to obtain a printable bulletin. When the applicator clicks within the PULA, the “Printable Bulletin” button turns from red to green. However, applicators may not understand that a red button indicates that a bulletin is not available to print. Having a different process, such as “No Bulletin” on the button when there is no printable bulletin available or not having the “Printable Bulletin” button appear until the PULA is selected, would more clearly communicate that no bulletins are in place for the location that the applicator is searching.

See the example below:

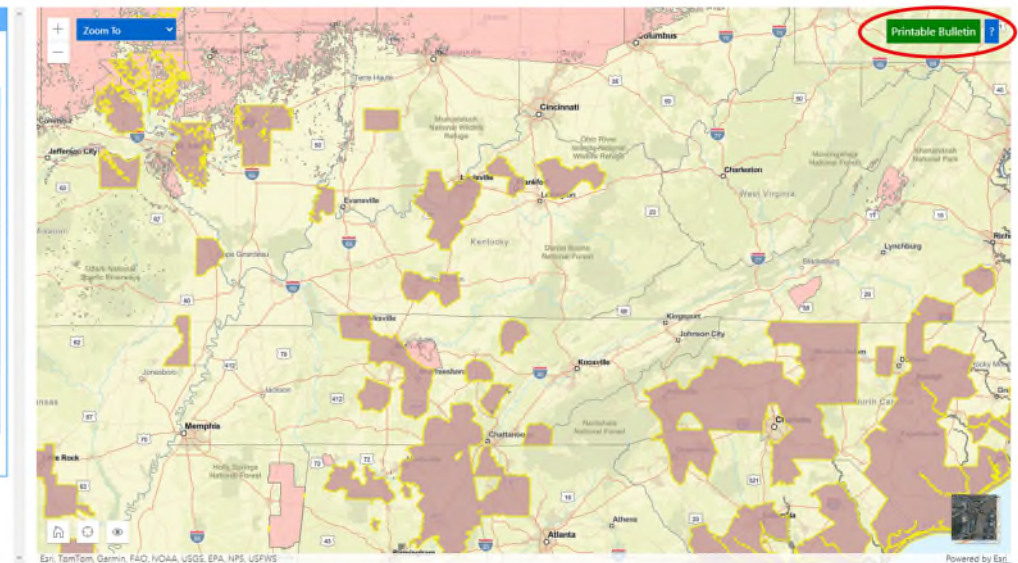
Location Search:
Find Place

Application Month:
November 2024

EPA Registration Number:



Limitations for Selected Area	
Pula ID: 52	
Event Name: Dicamba - 2020	
Application Month: November 2024	
Product	Count
AZ1472 PLUS VAPORGRIP TECHNOLOGY (100-1623) Alternate Names: TAVIUM PLUS VAPORGRIP TECHNOLOGY	1
ENGENIA HERBICIDE (7969-472)	1
FEXAPAN PLUS VAPORGRIP TECHNOLOGY (352-938)	1
TAVIUM PLUS VAPORGRIP TECHNOLOGY (100-1623) Alternate Names: TAVIUM PLUS VAPORGRIP TECHNOLOGY	1
XTENDIMAX WITH VAPORGRIP TECHNOLOGY (264-1210) Alternate Names: M1768 Herbicide	1
Full Details	
Clear Selected	



Recommendations:

- The SFIREG ESI committee recommends that the agency include the ability for applicators to search for application areas by legal description.
- The SFIREG ESI committee recommends that the agency change how applicators see that a bulletin is applicable and printable in BLT. This change will lead to fewer misunderstandings by both applicators and SLAs.

6. Fish and Wildlife Services (FWS) / National Marine Fisheries Service (NFMS) mitigation points consistency outlined on bulletins

SFIREG ESI recognizes that the agency conducts consultations with FWS and NFMS individually, and that each of those groups may have separate concerns and priorities in the protection of threatened and endangered

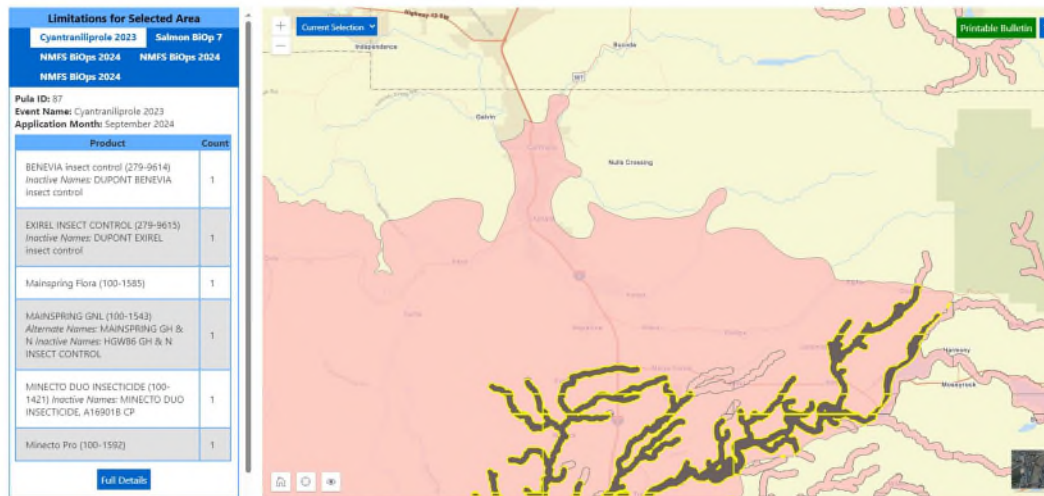
species. This has led to confusion and concerns regarding implementation of bulletin restrictions and requirements. Differing point scales and overlapping PULA boundaries lead to potentially unworkable PULA restrictions and subsequent enforcement of these requirements by SLAs.

Washington State Department of Agriculture (WSDA) provided the following example and comment regarding this issue, including providing it as a comment on the draft insecticide strategy:

“Regarding a Key Concern and Challenge with Implementation: WSDA recognizes that EPA is consulting with the National Marine Fisheries Service (NMFS) in a separate initiative, and that species listed under the authority of NMFS are not included within the scope of the Strategies, including this Draft Insecticide Strategy. We are looking forward to the conclusions of those consultations and we are hopeful for alignment by the time EPA’s Endangered Species strategies are finalized. In the interim, WSDA has some concerns regarding enforceability and implementation feasibility of bulletins that are already in effect.

Specifically, in some states, including Washington, many existing Bulletins for some insecticide active ingredients such as chlorpyrifos and diazinon established to protect salmon habitat, refer to the following “Drift and Runoff Reduction Measures and Associated Points¹.” This directs growers to choose and implement mitigation options to earn a total specified points on 0-80 point scale, from now on referred to as the “NMFS scale” in this comment letter. This NMFS scale point system for species under their jurisdiction, is not the same as the scale of 1-9 points described in the Strategies, including the Draft Insecticide Strategy based on consultations with Fish and Wildlife Services (FWS). WSDA is pleased to see this 1-9 point scale of “Drift or Runoff/Erosion Mitigation Measures and Associated Point-Values²” is well laid out with clear definitions in the most recently published Strategy, but we have concerns regarding implementation of mitigation measures on two very different scales. Specifically, in areas where Pesticide Use Limitation Areas (PULAs) overlap, a farmer would have to earn up to 80 mitigation points on one scale and up to 9 mitigation points on another scale. This leaves farmers to contend with two different mitigation point scales that describe the various drift and runoff/erosion mitigation options.

Further to complicate matters, the scales do not seem to align with the relative value for mitigation points within each system. For example, a “Functional riparian system alongside water ways, > 10 meters wide” earns a grower a total of 80 out of 80 needed points according to the labels referenced in the NMFS scale. A Riparian area of 30 to 59 feet, which WSDA would assume to be an equivalent on a farm, only earns you a total of 2 out of 9 mitigation points as outlined in EPA’s mitigation Crosswalk document. **Does EPA have a plan to integrate these point systems? Or is there an expectation that farmers move from one mitigation point system to another if operating in overlapping PULAs to be potentially faced with contradictory language? An example that illustrates a walkthrough, where a grower would need to account for overlapping PULAs between salmon habitat and terrestrial species would be valuable.”**



¹[Drift and Runoff Reduction Measures and Associated Points | US EPA](https://www.epa.gov/endangered-species/drift-and-runoff-reduction-measures-and-associated-points) link referred to on current Bulletins, with a mitigation scale of 0-80 points. <https://www.epa.gov/endangered-species/drift-and-runoff-reduction-measures-and-associated-points>

²Crosswalk of EPA's Ecological Mitigation Measures with USDA NRCS Conservation Practices in Support of EPA's Endangered Species Strategies. Table 1, Crosswalk between EPA Runoff/Erosion Mitigation Measures, Other Practices that Quality, Examples of Existing Conservation Practices that Meet the Mitigation Measures Identified by EPA, page 9. <https://www.regulations.gov/document/EPA-HQ-OPP-2023-0365-1136>

Use of different point scale systems unnecessarily complicates the process and makes it more difficult for applicators and SLAs to ensure that bulletin requirements and mitigation measures are properly implemented. Additionally, as WSDA points out in their comments, the scale systems do not align with the value for mitigation measures described in each system. This will result in confusion for both applicators and SLAs.

Recommendations:

- The SFIREG ESI committee recommends that the agency develop and utilize a single point scale system to determine mitigation requirements, rather than utilizing different mitigation point scale systems for FWS and NMFS mitigations.

Conclusion:

BLT in its current form has many issues that prevent it from being a tool that SLAs will be able to utilize to enforce endangered species bulletin language as part of a pesticide label, in addition to the limitations these issues will place on efforts by applicators to understand and comply with the Bulletin provisions.

The system is limited by a need for a strong internet connection, assumes applicators and SLAs have a working knowledge on how to find reliable information in an ill-suited system, provides bulletin format and language which is inadequate and not easily understood, and relies on limited agency resources to provide SLAs and applicators with system clarifications and work arounds when dealing with issues identified in the field. Additionally, the agency has not provided adequate resources to develop training materials, assuming that applicators and SLA staff understand endangered species bulletin access and applicability.

The SFIREG ESI committee has collected information from SLAs across the country which have identified issues applicators and the states will have utilizing the BLT system as currently implemented. The recommendations identified above would be steps toward improving the system and making it more likely that applicators and SLAs are able to utilize the BLT in a meaningful way.