

USDA Perspective on EPA's Herbicide Strategy

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USDA's Role in ESA Consultations for FIFRA Actions

- Member of the FIFRA-ESA Interagency Working Group (IWG) created under the 2018 Farm Bill
- USDA provides the grower perspective so that EPA and the Services understand
 1. how pesticides are typically used (*e.g.*, rates, timing, locations, application methods, target pests), and
 2. the implications of proposed mitigations (*e.g.*, feasibility, alternatives, potential unintended consequences).
- USDA's Office of Pest Management Policy submits public comments on many of EPA's proposals, providing constructive recommendations.
- We are focused on growers, but our goals are aligned with those of our Federal partners – we want to ensure that workable mitigations are put in place to protect listed species. If mitigations aren't practical for growers, they can't be effectively implemented.

Herbicide Strategy Comments: Runoff & Erosion Mitigations (1)

- Concerns
 - Variable efficacy of some measures is not reflected in the point system.
 - Growers may not practically be able to reach the number of points required to use medium- or high-risk herbicides. In particular: growers of specialty crops, dryland growers, growers on leveled lands.
 - Potential resistance concerns from focus on reducing application rates.
 - Lack of options for growers on leased land.
 - Accounting for precision application under rate reduction option.
- Suggestions
 - Adding scaling factors for practices that vary in efficacy by region or practice (e.g., cover cropping, no vs. reduced till).
 - Limit the points needed to a practical level for relevant cropping systems and consider the role of offsets to provide additional options.
 - Consider points for reducing the annual application rate (which would account for the total number of applications) rather than just the single application rate.
 - Consider the role of offsets to provide additional options for leased land.
 - Differentiate between lower overall per-acre rates due to precision technology and the rate applied to the target pest.

Herbicide Strategy Comments: Runoff & Erosion Mitigations (2)

- Additional Menu Suggestions
 - Leveled land – change <2% to <3%
 - Biochar/granulated activated carbon filters – effluent filtration, typically as part of a larger system (e.g., vegetated ditches)
 - Crop residue retention – leaving crop residue/stubble on the field following harvest; particularly relevant for sorghum
 - Integrated Pest Management – a prevention, avoidance, monitoring, and suppression approach to pest management
 - Polyacrylamide (PAM) application – irrigation water additive that reduces sediment in runoff by up to 95%, most commonly used in western states
 - Reservoir tillage for root crops – creates water retaining pockets between rows of crops such potatoes and sugar beets to reduce runoff

Herbicide Strategy Comments: Runoff/Erosion Menu Exemptions

- Concerns
 - Tile drainage exemption currently implies that growers can only use herbicides if their drainage is controlled in a retention pond or saturation buffer, neither of which are common.
 - 1,000 ft from habitat exemption – growers will have difficulty defining the location of “habitat” based on provided definitions.
- Suggestions
 - Tile drainage – expand the exemption to include filtration of effluent (e.g., by biochar filters or blind inlets) and allow other growers with tile drainage to use appropriate measures from the menu, including points for having tile drainage scaled by Koc of the pesticide.
 - Provide spatially explicit data to define habitat areas.
 - Conservation Program exemption – see next slide.

Conservation Program Exemption

- Allows growers to follow a **site-specific runoff and/or erosion plan** implemented according to the recommendations of a recognized conservation program OR designed in conjunction with a qualified professional instead of following the mitigation menu/points system.
- USDA strongly supports this approach and is working to understand who is already enrolled in conservation programs and what is needed to increase their reach.
 - May need financial support to develop new or bolster existing programs, ensure sufficient capacity for technical support, expand education/outreach to growers.
 - Program administrators need to know if they meet EPA's standards.
 - Certification/documentation of recommendations and actions is important.

OPMP Survey Results

- 287 respondents representing 4,700 outdoor ag operations
- ~80% of respondents participated in runoff/erosion reduction programs on one or more operations (~35% of total operations)
- Government programs were the most common (64% of respondents)
 - State programs cited: CA, IL, MD, MI, MN, MO, NC, NY, PA, TN, VA, VT, WI
- Specialty crop respondents participated in runoff/erosion programs ~10% less frequently than non-specialty crop respondents and reported using Federal and State programs about half as frequently.
- Reported barriers to program participation: operations did not experience problematic runoff/erosion (34%), no programs available (39%), too expensive (27%), on a waiting list (25%)
- Open comment themes: distrust of programs (esp. government), difficulty of paperwork and meeting program requirements (too much red tape), too expensive, leased land

Program Examples

- State programs: CA Irrigated Lands Regulatory Program, FL Dept of Agriculture and Consumer Services BMP program, MI Agriculture Environmental Assurance Program
- Local programs: Upper Susquehanna Coalition (22 Soil and Water Conservation Districts)
- Commodity-based program: U.S. Cotton Trust Protocol
- Non-profit program: Audubon Cooperative Sanctuary Program for Golf Courses

USDA Recommendations: Conservation Program Exemption

- Recommendations for defining qualifying programs, informed by OPMP survey. A qualifying program should:
 - Deliver site-specific guidance tailored to the grower's crop and/or location.
 - Focus on managing runoff or erosion from agricultural fields or other pesticide use sites. Variations in language to achieve the same goal should be acceptable (for example, soil loss, soil conservation, water quality protection). The promotion of IPM practices should also be considered as a valuable part of the bigger picture of judicious usage of pesticides.
 - Include technical advice from qualified professionals on which runoff or erosion practices are suitable for the farm as well as guidance or assistance on practice implementation.
 - Provide documentation of program participation.
 - Include verification of implementation of the recommended practices or activities. This should also include following up over time to ensure implementation and maintenance of the runoff/erosion reduction practices and to determine whether additional support is needed. The latter may need to be done by the grower if program participation is time limited.
- Working with qualified professionals on a site-specific plan is also encouraged.
 - Examples: CCAs, PCAs, ICCs, TSPs, extension agents, EnviroCert International, Inc. Certified Professionals in Erosion and Sediment Control

Challenges for Growers and Applicators

- Framework is extremely complex and will be difficult for growers and applicators to interpret and implement.
- Complex new requirements for ESA compliance are being introduced at a rapid pace.
- Need for technical and financial assistance to comply with runoff and erosion mitigation requirements. However, capacity is limited.
- Lack of compliance options for some cropping systems (e.g., orchards) and some growers (e.g., those who lease their land).
- Substantial training, education, and outreach are needed for success (e.g., BLT). Additional collaboration with State Lead Agencies is needed to facilitate training and outreach and to clarify enforcement expectations.

Questions?

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