



October 20, 2023

Jan Matuszko
Director, Environmental Fate and Effects Division
Office of Pesticide Programs
Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

Submitted electronically via Federal eRulemaking Portal

RE: Draft Herbicide Strategy Framework to Reduce Exposure of Federally Listed Endangered and Threatened Species and Designated Critical Habitats from the Use of Conventional Agricultural Herbicides (EPA-HQ-OPP-2023-0365)

Dear Ms. Matuszko,

On behalf of the Ohio Soybean Association (OSA), I am writing to express significant concerns with the draft herbicide strategy framework to reduce exposure of federally listed endangered and threatened species and designated critical habitats from the use of conventional agricultural herbicides as proposed (EPA-HQ-OPP-2023-0365).

The Ohio Soybean Association is a statewide membership organization which provides leadership for Ohio's soybean farmers in promoting effective policies and legislation to ensure a growing and profitable soybean industry. Soybean production makes up a significant portion of Ohio's agriculture industry with a total economic impact of more than \$7.5 billion¹. Our members engage in a diverse set of policy initiatives to help promote and grow these contributions to Ohio's economy.

Agricultural applications of herbicides are extremely important to the continued viability of Ohio farming operations and carry many benefits. If not properly managed, weeds can be economically devastating to farming operations and the communities in which they reside. Weeds compete with crops for limited resources, such as nutrients, moisture, and sunlight, resulting in significant yield reductions.

The Ohio Soybean Association understands the EPA has legal obligations related to the Endangered Species Act (ESA) and supports the agency meeting its statutory requirements. Further, OSA recognizes EPA has committed itself to an aggressive timetable via court settlement for implementing the herbicide strategy and other ESA-related pilots and strategies. However, if implemented as proposed, the herbicide strategy would be disastrous for Ohio farmers and rural communities. This complex, unworkable proposal would result in significant

¹ The Economic Impact of U.S. Soybeans and End Products on the U.S. Economy- 2023 Update, 2023. New York. LMC International.

new, costly regulatory burdens for thousands of Ohio agricultural producers. Others would simply be unable to comply with the proposal, undermining their continued access to herbicides.

In these comments we outline several specific concerns and questions we have about how such a strategy could be implemented. However, it's important to point out that OSA believes the basis of the entire strategy is built upon unrealistic assumptions and models that lead to an overstated risk to species and habitats. While we appreciate EPA may lack the resources to consider the effects of every pesticide on every species, the agency should develop efficient baseline data sets for each species that it could use for relatively swift jeopardy/adverse modification (J/AM) predictions on individual registration decisions.

Understanding Compliance Obligations

We question whether producers, applicators, crop consultants, and others tasked with its implementation can understand their obligations under this complex proposal, never mind their ability to practically implement it. Producers and applicators do not have the means, time, or ability to conduct the complex set of considerations needed for individual fields across hundreds or thousands of acres.

This proposal represents a significant new burden on the producer to accurately identify habitat in proximity to their farming operations. Definitions of habitat in the proposal are overly broad, and for many farmers it will be unclear as to the need to implement mitigation requirements. There are no maps for producers to use to determine where "habitat" exists, but they must know what is 1,000 feet beyond their field edge and be able to self-determine it is not "habitat" and thus not subject to mitigation. One way to address these issues is to modify the definitions of "habitat" to be species-specific. The EPA should also provide maps to assist producers with determining habitat and fields eligible for exemption.

We also have significant concerns with how producers will determine their commitments needed under the erosion/runoff mitigation "efficacy points" structure as proposed. A producer operating on hundreds or thousands of acres could have significantly different efficacy point needs and erosion/runoff mitigation obligations across their operation.

Further complicating the matter, producers will need to determine what herbicides they need for their operations to manage weeds for the crops they grow and what points are required for those herbicides in the region in which they operate. Keep in mind, a grower will need to consider not only what herbicides they could need for a field for one particular growing season, but what herbicides they could need on any crop they grow in that field over several years. Based on this consideration, they would need to adjust their fields accordingly, especially if structural modifications are required to the field to meet point needs (e.g., installing vegetative filter strips or riparian buffers). These erosion/runoff needs could also change as new herbicide products become available or complete registration review and have different point requirements, or producers face new weed or herbicide resistance (HR) threats and thus need to adjust the crop protection products they are using.

The maps that EPA uses for the herbicide strategy are problematic. In developing the Pesticide Use Limitation Areas (PULA), the agency relies exclusively on maps from the U.S. Fish and Wildlife Service's (FWS) Environmental Conservation Online System (ECOS), which can be overly broad. In many instances, ECOS maps are developed at the county level, listing a species as generally present everywhere in a county even if the species' true range only overlaps with a fraction of a county. This will create confusion and could subject producers to additional regulation who fall outside of a species' range and thus pose no risk to a species or its habitat. Many additional sources of species maps exist with state regulatory agencies, private commercial range database services, and other sources the EPA can use to refine their maps.

Concerns with Erosion/Runoff Point Proposal

Given the complexity of the erosion/runoff point proposals, OSA urges EPA to consider less complicated means for compliance. The current proposal risks placing growers and applicators in a position where it is difficult to determine their compliance obligation or reasonably put in place enough practices to achieve the needed efficacy points.

We appreciate the agency's willingness to expand the list of erosion/runoff mitigations for greater compliance opportunities. However, there are too few practices in the current proposal to meet compliance obligations, while costly to install practices offer relatively few "efficacy points". From a practical standpoint, many practices on the current list of mitigation options are not applicable in Ohio.

Enhancing options for mitigation measures should include producer participation in risk reduction training or education and allowing producers to complete a whole farm erosion/runoff conservation plan rather than site specific plans. Similarly, conservation plans developed by USDA's Natural Resources Conservation Service (NRCS), state conservation agencies, university extension personnel, or certified crop consultants should receive credit as mitigation.

In addition to an insufficient number of mitigations, some mitigation practices would be problematic for other reasons. By incentivizing rate reductions as an easy, affordable compliance option – especially when producers may have few other practical or affordable mitigation alternatives – we are concerned some applicators or producers might utilize this compliance option to close gaps in point needs and risk amplifying HR pressures. While OSA appreciates EPA clarifying that application rate reductions should not be made below minimum rates, we strongly recommend EPA make this explicit on individual product labels moving forward to avoid exacerbating HR risks.

There are several other mitigation practices we are concerned will enhance weed and HR pressures. For example, riparian areas, vegetated ditches, grassed waterways, and vegetative filter strips can serve as a refuge for weeds.^{2,3} In many cases, conservation experts would recommend herbicides to help manage weeds in these spaces, yet the herbicide strategy

² Presley, DeAnn. Kansas State University. N.D. *Maintaining grassed waterways - Maximize the benefits*. Accessed October 14, 2023. https://eupdate.agronomy.ksu.edu/article_new/maintaining-grassed-waterways-maximize-the-benefits-350

³ University of California Agriculture and Natural Resources. N.D. "Vegetative filter strips." *UC IPM*. Accessed October 14, 2023. https://ipm.ucanr.edu/mitigation/veg_filtering.html

discourages this, leaving producers with mowing and other labor-intensive means to removing weeds from these areas. For a producer operating on hundreds or thousands of acres, mowing would likely be impractical, leaving them with either fewer compliance options or risking proliferating weed pressures on their lands.

For producers who have sufficient options for compliance, costs for meeting these requirements could be enormous. According to Ohio State University Extension's Agricultural Best Management Practices Handbook the cost of a forest buffer is between \$218–\$729 per acre to plant and maintain; a vegetative filter strip is \$233 per acre annually; constructing a wetland to allow the management of surface and subsurface water for 100 acres was estimated to cost just over of \$10,000 for design and installation, with a cost of just under \$800 in subsequent years⁴. We continue to seek more information to better understand the feasibility and cost of compliance for farmers and would request the opportunity to share more information with the EPA in the near future.

Concerns with Subsurface Drainage Provision

The Ohio Soybean Association has concerns and questions regarding the intention of the proposal's provisions around subsurface drainage. Is it the intent of the EPA to provide an exemption from the need for other soil erosion and runoff mitigation measures *if* all subsurface drainage is controlled in a retention pond or sedimentation basin? Or conversely, is the intent to require all subsurface drainage to be controlled by such measures to comply with new requirements under the proposal? Would producers be required to attain both enough soil erosion and runoff mitigation points *and* control water by such measures to comply? Depending on the EPA's intent, this measure is misplaced and could be incredibly costly and unattainable in Ohio.

OSA would strongly object if the EPA interpretation is that farming operations with subsurface drainage cannot comply with erosion/runoff mitigations and farmers must install controlled drainage structures in which to direct effluent. First, the agency has not established that subsurface drainage results in increased risks of pesticide exposures. To the contrary, an analysis of 30 studies across North America found that subsurface drainage results in reduced pesticide concentrations relative to surface water exposures by as much as an order of magnitude.⁵

In addition, the cost to farm operations of such a policy would be astronomical. According to an analysis of the 2017 Census of Agriculture, forty-nine percent of cropland acres, over 5 million acres, in Ohio were drained by tile⁶. Much of this tile drainage is installed in the agriculturally rich Northwest region of the state where this requirement would subject thousands of farmers to this unworkable requirement.

Concerns with Spray Drift Mitigations

⁴ The Ohio State University Extension, Ag Best Management Handbook, 2023. <https://agbmps.osu.edu/bmp>

⁵ Kladvik, Eileen, J., Larry C. Brown, and James L. Baker. January 2001. "Pesticide Transport to Subsurface Tile Drains in Humid Regions of North America." *Critical Reviews In Environmental Science and Technology*. Vol. 31, Iss. 1. P 1-62. <https://www.tandfonline.com/doi/abs/10.1080/20016491089163>

⁶ Zulauf, Carl and Ben Brown. August 1, 2019. "Use of Tile, 2017 US Census of Agriculture." *farmdoc daily*. Vol. 9, Iss. 141. <https://farmdocdaily.illinois.edu/2019/08/use-of-tile-2017-us-census-of-agriculture.html>

Similar to the erosion/runoff mitigations, OSA also has several concerns with the downwind spray drift mitigations as proposed in the herbicide strategy. Ultimately, we are concerned the ways in which the agency approaches spray drift reduction measures in this proposal are unnecessary, unscientific, and will greatly harm agricultural operations.

First, the distances for the spray drift buffers are immense, and we are concerned they are not supported by sound science. For practical purposes, however, these significant distances – up to 500-feet for aerial applications and up to 200-feet for ground sprays – would leave large field areas untreated, in which weeds could refuge and result in significant crop damage. While we appreciate these distances can be reduced with some mitigations, even with these reductions, significant areas of fields would likely be left untreated, allowing for weeds to reinfest treated fields.

In some instances, especially with aerial applications or finer droplet applications, a windbreak may be required. Windbreaks meeting the agency’s definition would be extremely costly to install and maintain. The EPA should allow for the use of tank mix adjuvants as an alternative method to spray buffers. These tools can be relatively inexpensive compared with some of the measures the agency has proposed in the herbicide strategy and can result in significant reductions in spray drift risks.

Other Implications in Ohio

Ohio law gives the director of the Ohio Department of Agriculture (ODA) the authority to designate prohibited noxious weeds. Ohio “line fence law” requires landowners in unincorporated areas to control noxious weeds near a line fence. Landowners can be held liable for failing to comply with the law⁷. The herbicide strategy creates significant new challenges to complying with the law in Ohio.

The Ohio Soybean Association also understands the EPA is interested to learn more about the potential interplay between mitigation measures required under the herbicide strategy and state farmland management cost share programs. Ohio farmers have embraced conservation practices in our state, and we are fortunate to have an effective state-funded cost share program called H2Ohio.

While H2Ohio is focused on improving water quality, some of the land management practices can provide a dual benefit to help provide mitigation of herbicide runoff. However, even a program as robust as H2Ohio is significantly limited in the assistance it could provide to farmers seeking to comply with mitigation measures under the herbicide strategy. In fact, cover crops are the only eligible H2Ohio practice that overlaps with mitigation strategies outlined in the herbicide strategy. We should note that H2Ohio provides assistance to farmers for installation of drainage water management structures that reduce water flow, but do not require complete water retention.

⁷ Hall, Peggy. Ohio State University Extension Law Bulletin. OSU College of Food Agriculture, and Environmental Sciences. August 2019. <https://farmoffice.osu.edu/sites/aglaw/files/site-library/NoxiousWeedLawBulletin.pdf>

Until recently, the H2Ohio Program has been limited to eligible farmers in the Western Lake Erie Basin (WLEB) which consists of 24 of Ohio's 88 counties. A recent expansion of the program has made land management practices eligible to an additional 500,000 acres outside the WLEB⁸. While the program is a highly effective tool to help farmers address water quality issues, we assess it will have limited ability to assist farmers with compliance for the herbicide strategy.

Conclusion

The Ohio Soybean Association is a signatory to another group comment letter to the EPA on this proposal that covers other concerns relative to the industry's perspective on the herbicide strategy. Some of the topics, which are not included in these comments, include concerns over the EPA's compliance with legal obligations and the statutory foundation for ESA pesticide proposals. We fully support those public comments and urge your strong consideration of them.

While the Ohio Soybean Association supports the EPA becoming compliant with its legal obligations under ESA, we cannot support the herbicide strategy as proposed. This incredibly complex, costly, and onerous proposal presents a significant threat to Ohio agricultural herbicide users. There are better approaches EPA could take, and we strongly urge EPA to consider alternative or refined means for meeting its legal obligations.

Respectfully,



Brandon Kern

Director, Public Affairs and Issues Analysis

⁸ Ohio Department of Agriculture. H2Ohio Program. 2023. <https://h2.ohio.gov/agriculture/>