

September 23, 2024

Mr. Jake Li
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Submitted electronically via Federal eRulemaking Portal

RE: Draft Insecticide Strategy to Reduce Exposure of Federally Listed Endangered and Threatened Species and Designated Critical Habitats from the Use of Conventional Agricultural Insecticides (EPA-HQ-OPP-2024-0299)

Dear Deputy Assistant Administrator Li,

As organizations representing farmers, ranchers, applicators, retailers, co-ops, academics, landscapers, manufacturers, processors, crop consultants, among others, we write to provide comments on EPA's Draft Insecticide Strategy to Reduce Exposure of Federally Listed Endangered and Threatened Species and Designated Critical Habitats from the Use of Conventional Agricultural Insecticides (EPA-HQ-OPP-2024-0299) (hereafter "draft Insecticide Strategy" or "draft IS"). Insecticides are essential for U.S. agriculture, as well as to many non-agricultural users. To lose meaningful access to or use of these vital tools would stand to inflict billions of dollars in irreparable harm to U.S. crops, livestock operations, as well as the consumers we serve. We are greatly concerned that the cost and complexity of the draft IS, as proposed, would result in these harms coming to pass for many individual operations and our rural communities.

While we support EPA becoming compliant with the Endangered Species Act (ESA) and all the Agency's legal obligations, it must do so in a way that does not drastically disrupt U.S. agriculture, other vital users of insecticides, and the consumers who rely on the food, fuel, fiber, and other services we produce. Below, we share numerous concerns we have with this proposal, which the Agency should seriously consider and seek to significantly revise prior to finalizing this proposal or incorporating its mitigations into any registration decision. Failing to do so would inflict the irreparable harm we are concerned would otherwise occur and leave the Agency exposed to legal vulnerabilities that fail to provide the regulatory and legal certainty we seek.

Comment Period Extension Requests

Before considering the details and implications of the proposal, we are concerned with EPA's disregard for stakeholder requests to extend the public comment period for the draft IS. EPA offered stakeholders just 60 days to consider and comment on this complex, highly technical proposal, which spans more than 700 pages, at a time when the Agency also had open more than 16 other pesticide-related public comment periods. The comment period also comes at a time when many farmers, landowners, producers, and other agricultural stakeholders—the very stakeholders most likely to be impacted by this proposal—are at the height of fall harvest and least likely to be able to offer meaningful feedback.

On this docket, EPA received 27 different letters from more than 250 organizations raising these concerns and others, seeking relief from the Agency via an extension to the draft IS comment

period. The first of these requests was dated August 9, 2024. By August 12, 2024—just three days later, two of which were a Saturday and Sunday—EPA denied all pending requests for extension.

EPA has done itself and stakeholders a disservice in denying these requests. It has not only limited stakeholder opportunities for comment, but also the quantity and quality of feedback the Agency may have otherwise received to assist in improving this proposal. On one hand, EPA has publicly stated it is interested in meaningful engagement with stakeholders to solicit thoughtful feedback and ensure all parties and perspectives are considered in advancing this proposal, which would transform how insecticides are used in the United States. On the other hand, EPA's actions signal it has little interest in facilitating a reasonable process by which stakeholders could offer substantive feedback.

Below and elsewhere on this docket, we and others will provide as meaningful comments as possible given the truncated timeline available to comment; the length and complexity of the proposal; the numerous other concurrent comment periods; and the conflicts with the primary business responsibilities of impacted agricultural stakeholders. In any response to comments, EPA should carefully consider how it responds if the Agency feels there have been insufficient comments on the proposal generally or aspects of it. Any lack of feedback is a consequence of the process the Agency established for offering comment, not the stakeholders who have been placed in this regrettably difficult situation.

Importance of Insecticides for Agriculture, Other Uses

As stated at the outset of these comments, insecticides are vitally important for many farming operations and other non-agricultural users as well. In agriculture, if left uncontrolled insect pests can quickly destroy a crop, even to the point of total crop failure. Insect pest challenges are not unique to any one crop or group of crops but are ubiquitous across agriculture. However, farmers may face different types and intensity of insect pests depending upon their crop type, geography, and other factors.

Agricultural Uses, Benefits

One need not look far in agriculture to see the destructive potential of insect pests. In soybeans, areas infested with the soybean gall midge can result in 100 percent yield loss.¹ For cotton, thrips can result in yield losses ranging from 30-50 percent if not controlled.² In 2008, the invasive Spotted Wing Drosophila (SWD) was first detected in California, which quickly spread up the west coast of the U.S. in subsequent years, posing a significant new threat to fruit crops grown in these areas. While SWD damage can range significantly, yield losses up to 80 percent have been detected. An estimate based on 2008 crop values predicting a modest 20 percent yield loss in strawberries, blueberries, raspberries, blackberries, and cherries from California, Oregon, and Washington predicted a farmgate value loss up \$2.577 billion annually.³ Farmers need continued access to insecticides to protect crops against these insect pests and others.

¹ Saeugling, Aaron. January 23, 2019. "What's this midge all about?" *Farm Progress*. <https://www.farmprogress.com/crop-protection/what-s-this-midge-all-about->

² Cook, Don, Ames Herbert, D. Scott Akin, and Jack Reed. October 1, 2011. "Biology, Crop Injury, and Management of Thrips (Thysanoptera: Thripidae) Infesting Cotton Seedlings in the United States." *Journal of Integrated Pest Management*. Vol. 2, Iss. 2. P. B1-B9. <https://academic.oup.com/jipm/article/2/2/B1/860751>

³ Bolta, Mark P., Rachel E. Goodhue, and Frank G. Zalom. University of California. Giannini Foundation of Agricultural Economics. 2009. *Spotted Wing Drosophila: Potential Economic Impact of a Newly Established Pest*. https://s.giannini.ucop.edu/uploads/giannini_public/81/fe/81feb5c9-f722-4018-85ec-64519d1bbc95/v13n3_2.pdf



A soybean field infested with soybean gall midge⁴

It is important to note insect pests do not just pose a direct threat to crops, but may spread secondary viral or bacterial pests, or increase crop susceptibility to fungal outbreaks. For example, due to a recently implemented ban on neonicotinoid insecticides, 2020 sugarbeet yields in France and the United Kingdom suffered an estimated 30 and 25 percent yield loss, respectively, due to aphids spreading the beet yellows virus. In the U.K., this amounted to a single year £67 million loss for the sugarbeet industry.⁵ Since 2005, the detection and spread of Asian citrus psyllids in Florida has wreaked havoc on the local citrus industry. These tiny piercing-sucking insects can spread bacteria which inflicts a disease known as huanglongbing (HLB), or citrus greening. HLB prevents citrus fruit from ripening, reduces tree yield, and ultimately results in tree death. The impact of HLB has been dramatic, as the number of Florida citrus farmers from 2005 to 2016 reduced from 5,000 to 2,000; the number of citrus packing plants dropped from 80 to 26; and the industry has shed more than 34,000 jobs.⁶



Asian citrus psyllids, which are vectors for huanglongbing (HLB), or citrus greening disease, and afflicted citrus⁷

⁴ Saeugling, Aaron. "What's this midge all about?"

⁵ Popov, Olivera. N.D. *Transmission risks of Beet Yellows Virus by Myzus persicae and Aphis fabae aphids in diverse environmental conditions*. Accessed September 14, 2024.

https://fiver.ifvcns.rs/bitstream/handle/123456789/4435/bitstream_11829.pdf?sequence=1&isAllowed=y

⁶ University of Florida Institute of Food and Agriculture. N.D. *How the Asian Citrus Psyllid Brought the Citrus Industry to Its Knees*. Accessed September 14, 2024. <https://onlineentomology.ifas.ufl.edu/how-the-asian-citrus-psyllid-brought-the-citrus-industry-to-its-knees/>

⁷ Ibid.

Farmers and landowners also use insecticides to maintain important conservation practices and improve environmental outcomes, including several of the runoff/erosion and spray drift mitigations contained in the draft IS. For example, cover crops are well documented to reduce soil erosion, help to build up sequestered soil carbon, among other benefits. However, they can also provide an overwinter refuge for insect pests (often referred to as a “green bridge”). Access to insecticides, including seed treatments, are important tools for farmers to maintain cover crops without creating additional insect pest pressures, making this practice viable for many farming operations.⁸ Likewise, vegetative filter strips or other edge of field buffer practices can serve as a refuge for insect pests to infest fields.⁹ In order to maintain these conservation practices, several of which are supported by the draft IS, producers need to retain meaningful use and access to insecticides.

Impacts of Losing Access to Insecticides

The consequences of losing access to or use of insecticides, which may result from the draft IS, would be disastrous. As discussed above, U.S. agricultural producers stand to suffer tens of billions of dollars in crop losses and diminished conservation outcomes without continued access and meaningful use of these vital tools. Further, consumers may face higher costs or decreased access to foods or textile products; livestock operations may face steeper prices for animal feed; fuel and energy prices could rise due to diminished supplies of biofuels feedstocks; among numerous other irreparable harms.

While we understand that the proposed draft IS is limited in scope to agricultural uses, non-agricultural uses of insecticides may also be impacted by the proposal. As reported by EPA, from 2005-2012, agricultural uses accounted for approximately 90 percent of conventional pesticide uses in the United States.¹⁰ Should agricultural insecticide access and use be significantly undermined via implementation of this proposal, registrants may discontinue offering new or re-registering existing products if market opportunities have drastically diminished. A recent study found that from 2014-2019 it took an average of 12.1 years and cost \$301 million to bring a new pesticidal active ingredient to market. Importantly, this study took place prior to EPA seeking to implement its ESA Workplan, which is likely to add years and significant costs to the domestic pesticide registration process.

Currently, there are numerous critical non-agricultural uses of insecticides, such as public health initiatives (e.g. mosquito control); invasive species management; forestry; protecting commercial and residential facilities (e.g. termites); maintaining landscaping; among other uses. For example, a U.S. Forest Service study predicted the invasive Emerald Ash Borer (EAB) could jeopardize 17 million ash trees and inflict as much as \$10.7 billion in damage from 2009-2019.¹¹ Many of the insecticidal active ingredients used for protecting trees from EAB are registered for and primarily

⁸ Brown, Sebe. University of Tennessee – Institute of Agriculture. March 24, 2023. *Breaking the Green Bridge*. <https://news.utcrops.com/2023/03/breaking-the-green-bridge/>

⁹ Colquhoun, J., R. Lins, and C. Cole. University of Oregon-Extension. August 2008. *Vegetative Filter Strips Near Surface Water in the Pacific Northwest*. <https://ir.library.oregonstate.edu/downloads/d504rk81t>

¹⁰ Atwood, Donald, and Claire Paisley-Jones. U.S. Environmental Protection Agency. Office of Chemical Safety and Pollution Prevention. Office of Pesticide Programs. 2017. *Pesticides Industry Sales and Usage: 2008-2012 Market Estimates*. P. 13. https://www.epa.gov/sites/default/files/2017-01/documents/pesticides-industry-sales-usage-2016_0.pdf

¹¹ Kovacs, Kent F., Robert G. Height, Deborah G. McCullough, Rodrigo J. Mercader, Nathan W. Siegert, Andrew M. Liebhold. U.S. Department of Agriculture. U.S. Forest Service. September 21, 2009. “Cost of potential emerald ash borer damage in U.S communities, 2009-2019.” *Ecological Economics*. Vol. 69. P. 569-578. <https://research.fs.usda.gov/treearch/34370>

used in agriculture.¹² Given the significant cost to register and re-register active ingredients, we are concerned that should implementation of the draft IS jeopardize agricultural uses of insecticides, it may make it more difficult for registrants to continue financially supporting products for these critical non-agricultural uses as well. This could significantly impair efforts to protect public health from mosquito-borne illnesses, control the spread of invasive insect species, or protect commercial, residential, and public facilities and landscapes, resulting in additional billions of dollars in impacts to the U.S. economy.

It is important to note that should implementation of the draft IS undermine access to or use of even a few insecticidal tools, it could also significantly harm insect pest resistance management efforts. To prevent insect pest populations from selecting for resistance to tools, farmers and other pesticide users rotate or mix insecticidal tools with multiple biochemical modes of action (MOA). However, if ESA-related restrictions result in insecticide users losing access to a tool with a unique MOA vital for controlling a certain insect pest, that pest population will more quickly develop resistance to the remaining insecticidal tools available to the user, hastening their decline in efficacy.

U.S. agricultural producers, non-agricultural insecticide users, conservation outcomes, and consumers stand to suffer billions of dollars in irreparable harm should implementation of the draft IS or ESA mitigations generally impede the use of insecticides. We strongly urge EPA to carefully consider the ways in which it is seeking to meet its ESA obligations to ensure these great harms do not result from implementation.

Draft Insecticide Strategy – Observations, Concerns, and Improvements

With this background in mind, we have numerous observations and recommendations for EPA on the draft IS. From a high level, the Agency should know that this proposal is incredibly complicated and likely to be difficult for producers and applicators to carry out their compliance obligations. In several instances, further clarification is also needed in how EPA envisions implementation would occur. We also remain greatly concerned with the few numbers and types of runoff/erosion and spray drift buffer mitigations available to growers and landowners, especially how costly many of those practices would be to install and maintain.

It is important that EPA understand the environment in which it would be seeking to have U.S. agricultural producers implement new costly mitigations. Many crop and commodity prices have experienced significant downward pressure in the last two years, while input prices and other expenses (e.g. inflationary pressures, interest on loans) have increased.¹³ Many farms will be operating at a net loss this year and possibly into the next couple of years, jeopardizing their economic viability. The farm safety net in the current farm bill has failed to sufficiently respond, impacting producers' abilities to weather these economically challenging conditions.¹⁴ To impose billions of dollars in new regulatory costs on U.S. producers at this time as a prerequisite to continue using pesticidal tools farmers need to grow productively and sustainably will be financially ruinous for many operations. We urge EPA to consider the feedback below and how the

¹² Herms, Daniel A. Herms, Deborah G. McCullough, Clifford S. Sadof, David R. Smitley, Frederick D. Miller, and Whitney Cranshaw. 2019. "Insecticide Options for Protecting Ash Trees from Emerald Ash Borer." *North Central IPM Center Bulletin*. P. 9. <https://extension.entm.purdue.edu/EAB/PDF/NC-IPM.pdf>

¹³ U.S. Department of Agriculture. Economic Research Service. September 5, 2024. *Farm Sector Income & Finances: Farm Sector Income Forecast*. <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/farm-sector-income-forecast/>

¹⁴ Ibid.

Agency might alleviate the cost and compliance burdens of ESA on U.S. farmers, which otherwise could inflict economic disaster on our agricultural communities.

Complicated and Onerous to Implement

One of our primary concerns is how complicated the draft IS would be for growers and applicators to understand their compliance burden and implement the proposed mitigations. When considering runoff/erosion mitigations, a producer would first need to consider if the field on which they are seeking to make an application is within 1,000 feet of unmanaged areas. If so, then they would need to determine if that field is in a pesticide use limitation area (PULA). They would need to consider what crop they are growing, the potential pests they may contend with, what products they would need to treat those pests, and how many efficacy points they may need to use those products on those crops in that area.

A grower would need to not only predict potential crop pests that may occur annually, but also those that could occur once in every several years and what insecticidal tools would be needed to control those pests. They would also need to calculate these factors for not just one crop, but every crop they have in their rotation. A producer is unlikely to install a costly runoff/erosion mitigation for one growing season to access an insecticide needed to control a pest for one crop, only to remove that mitigation the following season if they no longer need the points for that tool. Therefore, if a grower produces five crops over several years, they must consider every possible insect pest they may face for all five crops, what tools would be needed to manage those pests, and how many points they may need for each. Failing to predict the appearance of infrequent or novel insect pests that a grower has not previously managed could mean not having enough efficacy points on a field to use the necessary tools to control that pest, potentially leading to significant crop damage.

Additional factors to be considered are field geography and features, such as the pesticide runoff vulnerability of the county in which the field is located, as well as the field slope and soil type. A grower then must also survey what existing mitigations from the current list of options they have on a field to comprehend what their baseline efficacy points are. After they establish a baseline, they would then need to consider what runoff/erosion practices are available to them that are practically, financially, and agronomically viable for that field and geography. As previously communicated to the Agency, not all practices are suitable for all operations. For example, cover crops may be difficult to implement in drier or colder climates where they may compete with a primary crop for limited soil moisture or could be difficult to establish post-harvest. They would also not be suitable for certain crop operations, such as orchards. As discussed above, many of edge of field practices could also be difficult for producers to adopt in regions with heavy insect or weed pressures, as they can serve as a refuge for weeds or insect pests to infest fields.

Like with runoff/erosion, a producer or applicator will have to make similar considerations with their spray drift obligations, which may be even more complicated. Once a producer knows what tools they may need to manage an insect pest, they will then have to determine the downwind spray drift buffer needed to use those tools. Factors for this consideration will include the insecticidal tools being used on the respective crop and whether a field exists in a generalist area or PULA. There are other field characteristics that will need to be considered, such as whether there are windbreaks or managed areas adjacent to a field.

Many considerations will also need to occur at the time of application. For instance, a producer or applicator will need to determine the type of application required. If a field has wet soil at the time an application is needed and a ground sprayer is likely to get stuck in mud, aerial application may

be essential. However, that aerial application may also require a larger buffer distance. A late-season insect pest that establishes lower on a mature crop or in the tree canopy may require finer droplet sizes or an airblast application to ensure sufficient coverage for effective pest treatment. Applicators will also have to consider factors, such as wind speed and direction, humidity, and temperature. If the wind direction changes ahead of an application, either away from or towards a windbreak or managed area, it could result in a buffer direction, distance, or size changing within a matter of minutes. This could be particularly problematic if the area in which a pest is most heavily present in a field and is in the greatest need of treatment now falls within a buffer zone.

To assist with determining the complicated web of compliance obligations, farmers and applicators may have to visit several websites in advance of an application, including Bulletins Live! Two to determine application restrictions; a mitigation website to determine what compliance measures are available; potentially another website on FIFRA interim ecological mitigations; possibly a mitigation calculator tool EPA has pledged to make available for assisting with compliance; among possibly others, such as guidance from state regulatory agencies. We encourage EPA to keep in mind that many producers may not have reliable internet access, especially those producing in rural areas, which may present connectivity issues. Further, the above system is contingent on the websites growers and applicators need to consult being reliably available, which has not always been the case.



A screenshot of the Bulletins Live! Two website from July 4, 2024, which experienced an outage for several weeks during June and July 2024—a critical window for some insecticide applications

The above calculations would not be a one-time process but may need to be replicated dozens to hundreds of times for every field a grower has in production, potentially every time an application needs to be made. This complicated process would not only impose significant new burdens, but could be incredibly difficult to comply with, placing farmers and applicators at greater risk of enforcement or legal jeopardy. We appreciate EPA will not be imposing record keeping requirements and is offering a point for producers who do. However, this matter largely will not be up to EPA, but the states, which are primarily responsible for enforcement under FIFRA.

To mitigate the significant cost and burden the draft IS and other ESA proposals are likely to impose on state regulatory agencies, we expect some states may require producers under their jurisdiction to keep ESA compliance records. Even those producers not required by their state to keep records may be likely to do so, given potential legal liabilities they may face under FIFRA or ESA should they be unable to produce records demonstrating compliance. This will create an enormous paperwork

burden for many farming operations who are currently ill positioned to handle a new cost of this magnitude given the state of the farm economy. We not only encourage EPA to contemplate ways in which enforcement discretion or safe harbors might be offered to producers and applicators who are diligently seeking to comply with this complicated system, but also seek ways to reduce the complexity of the draft IS, on which we have some ideas offered further below.

Cost, Challenges of Compliance

In addition to the complexity of the draft IS, we also remain greatly concerned with the cost and difficulty many of the compliance options in this proposal could impose on producers. While we appreciate EPA for recognizing there were insufficient compliance options in previous ESA proposals (i.e. the draft Herbicide Strategy, the Vulnerable Species Pilot Project), many of the additional options the Agency has made available are expansions of previous options. For instance, where we previously only had one compliance option for vegetative filter strips, riparian areas, and cover crops (i.e. three total options), we now have three options for each of those (e.g. different sizes of riparian areas), or nine total practices. However, if a producer was unable to implement cover crops in the first place, having two additional cover crop options will not benefit their operation. Additionally, many of the compliance options made available in the draft IS continue to be prohibitively expensive, challenging to implement, and do not offer the flexibility producers need to make this proposal viable for U.S. agriculture.

Nearly all the runoff/erosion mitigations contained in the draft IS would still require physical field modifications, which could be very costly to implement. For instance, a 2016 analysis estimated that in Iowa the average cost of establishing a riparian buffer could average \$330 per acre annually; a vegetative filter strip could cost \$233 per acre annually; constructing a wetland to allow the management of surface and subsurface water for 100 acres was estimated to carry an upfront cost of \$10,022, with a cost of \$785 in subsequent years.¹⁵ A 1993 estimate from Missouri for establishing terrace cropping anticipates a cost range of \$100-\$250 per acre, depending on the terrace system.¹⁶ Adjusted for inflation, this amounts to \$216.06-\$540.14 per acre in August 2024.¹⁷ A California conservation district estimate for installing a grassed waterway is expected “to be around \$1000 or more.”¹⁸

While projects of this nature may be manageable on a single acre, extrapolated across hundreds or thousands of acres costs quickly become unsustainable. For example, for an individual producer to install vegetative filter strips across 500 acres would cost approximately \$116,500 annually. And this only represents the cost of implementing one conservation practice. To implement several, as may be required by the draft IS, might represent a financial obligation of millions of dollars annually. It is important to note these cost estimates are also based on current market demand. If millions of producers were suddenly and simultaneously seeking to install erosion/runoff mitigations across hundreds of millions of acres of U.S. farmland, costs for labor, materials, and equipment to implement these practices would increase significantly. Additionally, USDA conservation cost share programs, such as the Environmental Quality Incentives Program (EQIP), are oversubscribed

¹⁵ Tyndall, John C. and Troy Bowman. Iowa State University and Alabama A&M University. December 2016. *Nutrient Reduction Strategy Decision Support Tool*. <https://bmpcosttools.nrem.iastate.edu/>

¹⁶ Schottman, Robert W., and John White. University of Missouri-Extension. October 1993. *Choosing Terrace Systems*. <https://extension.missouri.edu/publications/g1500>

¹⁷ U.S. Bureau of Labor Statistics. N.D. *CPI Inflation Calculator*. Accessed September 18, 2023. <https://data.bls.gov/cgi-bin/cpicalc.pl>. Dates used for inflation adjustment calculator were October 1993 and August 2024.

¹⁸ Yolo County Resource Conservation District. N.D. *Vegetated Ditches*. Accessed September 18, 2024. <https://yolorcd.org/resources/ag-conservation-practices/vegetated-ditches/>

based on the available resources, meaning there is likely to be little financial assistance for farmers to implement these new practices.

EPA should also note that the U.S. agricultural economy has already been experiencing a significant labor shortage for years. A 2023 estimate found that in Kansas alone agriculture labor shortages were costing the state economy as much as \$11.7 billion.¹⁹ Another estimate found that in 2014 U.S. fruit and vegetable producers were forfeiting an additional \$3.1 billion in revenues annually due to labor shortages.²⁰ U.S. agricultural producers already lack the labor needed for running their basic operations. Simply put, there is nowhere near enough additional labor needed to install and maintain field modification conservation practices for runoff/erosion reduction or spray drift mitigation across hundreds of millions of cropland acres.

In addition to a shortage of labor needed to install and maintain conservation practices, there is also a shortage of technical experts who can assist producers to ensure practices are meeting specifications to reduce runoff/erosion and spray drift risks. USDA's Natural Resources Conservation Service (NRCS), for example, is experiencing significant retirements and a staffing shortage needed to fulfill their existing responsibilities. It is hard to envision a scenario of a short-staffed agency successfully assisting millions of farming operations to implement new practices to fulfill their ESA obligations.²¹

Another concern that has previously been raised with EPA that remains unaddressed in the draft IS is how tenant farmers would implement the ESA measures. As discussed, most of the runoff practices available to producers require physical field modifications, which tenant farmers may not have the contractual authority to implement. Therefore, it is likely many of these producers may have insufficient practices available by which to comply, jeopardizing their ability to continue using needed insecticidal tools. Additionally, because many tenant farmers often engage in shorter-term contracts with landlords (e.g. three to five years) many would likely be unwilling to make the financial investment necessary by installing conservation practices on land they may not be farming in a few short years. Given that approximately 40 percent of U.S. farmed acres operate under this model, it could be incredibly disruptive to U.S. agriculture should EPA not provide affordable, viable methods for both tenants and landowners to comply with ESA obligations.²²

Additional Challenges with Some Practices

We have additional concerns with some of the practices listed in the draft IS as well. An issue many stakeholders have raised with EPA in the past is how the rate reduction option is characterized and whether it lends itself to exacerbating pest resistance pressure. This continues to be a concern in the draft IS. For both the spray drift buffer and runoff/erosion mitigation measures, farmers or applicators who may be one or two points from meeting their compliance needs could simply cut their rate to make up the difference. However, this could fail to be immediately efficacious for treating certain pests, and in the medium-to-long term, this could contribute to the spread of

¹⁹ Melgares, Pat. November 27, 2023. "Study: Ag labor shortages cost state economy as much as \$11.7B." *K-State Research and Extension News*. <https://www.ksre.k-state.edu/news/stories/2023/11/agriculture-impact-of-labor-shortages.html>

²⁰ New American Economy Research Fund. N.D. *Agriculture*. Accessed September 18, 2024. <https://research.newamericaneconomy.org/issues/agriculture/>

²¹ Fatka, Jacqui. March 15, 2023. "NRCS: On the Hunt for Hundreds of New Employees." *Agri-Pulse*. <https://www.agri-pulse.com/articles/19042-nrcs-on-the-hunt-for-hundreds-of-new-employees>

²² Winters-Michaud, Clayton P. U.S. Department of Agriculture. Economic Research Service. Updated May 22, 2024. *2022 Census of Agriculture: Share of farmland rented holds steady at 39 percent*. <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=109182>

metabolic insecticide resistance in pest populations where an insect pest survives treatment and reproduces. We urge EPA clarify these measures may not apply at rates below what are recommended for effectively treating intended pests.

Further, we are concerned with the draft IS' overreliance on downwind windbreaks/riparian areas and reduced portion of field treated as the primary mechanisms for reducing downwind spray drift buffers. As discussed above, edge of field areas, like riparian areas, can serve as refuges for insect pests to reinfest fields. Reducing the portion of a field treated or requiring a significant downwind spray buffer could leave significant areas of crops untreated and susceptible to crop damage. We encourage EPA to expand this list to provide additional mitigation measures that will not result in inadvertently increase risks of insect pest reinfestation or expose crops to greater damage.

We are also concerned with EPA's potential of implementing on-field mitigations for these same reasons. For example, if a grower needs to make an insecticide application to prevent catastrophic crop damage but cannot due to temporal restrictions aimed at mitigating a species-specific on-field risk, it could place the farmer in the position of losing an entire crop. We urge EPA to carefully weigh the risks on-field mitigations may pose to farming operations and consider options such as compensatory mitigations to offset any potential on-field risks to species.

Regarding chemigation, the draft IS is unclear what mitigation measures may be required to continue using this application method, which is vital for many producers. While the proposal provides several potential mitigations, it is not at all clear under what conditions they may be required (e.g. based on different active ingredients applied). We encourage EPA to engage with USDA as well as stakeholder groups that rely on or implement chemigation techniques to help these groups better comprehend EPA's intent with chemigations measures, and so that the Agency can better understand how these application techniques are administered.

Need for Continued Mitigation Flexibility, Additional Options

As discussed above, not every practice is suitable for every operation, every crop, in every geography, and many will be prohibitively costly or challenging for producers to implement. Agricultural operations are not one-size-fits-all, and we should not expect their ability to uniformly comply with rigid regulatory requirements. We encourage EPA to continue working with stakeholders to identify and add additional mitigation measures for compliance. It is especially important to identify practices that are not contingent on crop type, geography, or other variable factors, and do not require physical modifications to croplands, which could require producers to take land out of production and further impact the economic viability of farms.²³

For example, we encourage the Agency to add risk reduction training or education to the list of compliance options. A systematic review and meta-analysis of pesticide training programs were significantly effective at reducing pesticide exposure risks to agricultural workers.²⁴ Likewise, we believe it could be effective at helping train applicators and growers in ways to effectively reduce ecological and species-specific risks. Another benefit of adding a training option to this list of

²³ Duzy, Leah M., David J. Campana, and Richard Brain. December 15, 2023. "Agroeconomic costs for meeting the Environmental Protection Agency's mitigation menu approach to pesticide regulation." *Agricultural & Environmental Letters*. Vol. 2, Iss. 8. <https://access.onlinelibrary.wiley.com/doi/ful/10.1002/ael2.20119>

²⁴ Ayaz, Dilek, Selma Öncel, and Engin Karadağ. February 1, 2022. "The effectiveness of educational interventions aimed at agricultural workers' knowledge, behaviour, and risk perception for reducing the risk of pesticide exposure: a systematic review and meta-analysis." *International Archives of Occupational and Environmental Health*. Vol. 95. P. 1167-1178. <https://link.springer.com/article/10.1007/s00420-022-01838-8#citeas>

approved mitigations is that it could help better familiarize growers and applicators with this novel, complex regulatory framework, the concerns with which we discussed above.

We appreciate EPA adding drift reduction tank mix adjuvants (DRA) to the list of approved spray drift mitigations in the final Herbicide Strategy. DRAs are an affordable, effective option for reducing spray drift risks not contingent on varying factors, like crop type or geography. However, we believe available data suggests these tools can reduce drift potential and thus warrant reducing spray drift buffers more than the 15-30 percent that EPA has afforded them. We recommend EPA consider efficacy data submitted by manufacturers to both allow DRA use as a mitigation for insecticide use and permit greater reduction in buffers beyond the 15-30 percent in the final Herbicide Strategy.

Like with DRAs, soil amendments can be an effective measure for reducing runoff and erosion risks. For example, studies have shown that biochar can reduce runoff risks, especially when used in conjunction with other runoff reduction measures, such as continuous vegetative soil cover.²⁵ Other soil amendments, such as humic acid and peat, have been specifically demonstrated to significantly reduce runoff of herbicides in soil.²⁶ We encourage EPA to consider addition these types of soil amendment mitigations to the list of approved runoff/erosion reduction measures under the ESA strategies as well.

While we appreciate EPA offering a point to growers who work with a certified conservation expert on runoff reduction and two points for those who operate under a conservation program, we feel more points should be afforded for these options. Growers consulting with these experts and establishing runoff/erosion reduction plans on their operations are making diligent, intentional steps to reduce runoff/erosion, which will have been verified by conservation experts. Following the criteria EPA has laid out in its expectations for these mitigations, we would expect to see significant reductions in runoff and erosion well beyond the one and two points, respectively, EPA has afforded for these options.

Further, we encourage EPA to reconsider its position on allowing producers who comply with state runoff/erosion best management practice (BMP) plans to be deemed compliant with their ESA runoff/erosion requirements. Like with conservation plans, these plans have made significant strides in reducing runoff/erosion in watersheds in the states with established BMPs. Growers participating in these programs are meeting stringent standards to reduce runoff/erosion risks and should be credited for their efforts. Failing to offer compliance benefits for these producers risks imposing additional, unnecessary restrictions above and beyond what states have already found effective at reducing runoff/erosion in their jurisdictions.

As proposed, the draft IS risks posing enormous new regulatory costs and compliance burdens on U.S. farmers, at a time when our agricultural community is ill equipped to absorb these costs and challenges. Prior to any finalization of the IS, we urge EPA to work closely with USDA and stakeholders to ease the various difficulties described above, as well as offer additional compliance options that are affordable, are not contingent on variable factors, and do not require cropland modifications.

²⁵ Gholamahmadi, Behrouz, Simon Jeffery, Oscar Gonzalez-Pelayo, Sergio Alegre Prats, Ana Catarina Bastos, Jan Jacob Keizer, and Frank G.A. Verheijen. May 1, 2023. "Biochar impacts on runoff and soil erosion by water: A systematic global scale meta-analysis." *Science of the Total Environment*. Vol. 871, Art. 161860. <https://www.sciencedirect.com/science/article/pii/S0048969723004758?via%3Dihub>

²⁶ Si, Youbin, Jing Zhang, Shenqiang Wang, Ligan Zhang, Dongmei Zhou. January 2006. "Influence of organic amendment on the adsorption and leaching of ethametsulfuron-methyl in acidic soils in China." *Geoderma*. Vol. 130, Iss. 1-2. P. 66-67. <https://www.sciencedirect.com/science/article/abs/pii/S0016706105000133>

ESA Risk Assessment Improvements

Additionally, we believe EPA should make more probabilistic science- and data-based revisions to its ESA risk assessment framework. These improvements could help the Agency meet its ESA responsibilities and better identify species populations truly at risk from pesticide exposures, while also helping to reduce ESA burdens on U.S. agricultural producers.

Frequently, EPA relies on less refined models and more conservative assumptions in assessing its risks to endangered species and critical habitats. These assumptions, often by design, overstate risks for initial risk screening purposes. However, when the Agency relies upon them for making regulatory decisions, it results in greater restrictions than are necessary to protect species and critical habitat, imposing excessive costs and burdens upon pesticide users. EPA continues to rely on these conservative assumptions and unrefined models in the draft IS.

For example, for off-target spray drift deposition, EPA's AgDrift model assumes a maximum label rate for a single application used across bare soil with no obstructions. These assumptions do not reflect how pesticide users actually use pesticidal tools and thus overstate risk. Further, these assumptions amplify other risk predictions, as EPA uses these AgDrift predictions to develop dietary and contact exposures for non-target species, deposition into lakes, ponds, and vernal pools, among other routes of exposure.

There are similar challenges for predicting runoff and erosion. For instance, EPA generalizes estimated environmental concentrations (EEC) in waters across low resolution, multi-state hydrological unit code (HUC-2) areas. However, EPA recently used a much higher resolution 30-meter by 30-meter crop-specific runoff assessment overlapped with the Cropland Data Layer (CDL) for the Enlist and Enlist Duo registrations.²⁷ The significantly increased map resolution allowed EPA to assess with much greater specificity where EECs may be higher and potentially posed genuine ecological risk. This approach is contrasted to the current standard HUC-2 resolution, which may assign higher EECs (and thus greater alleged ecological risk requiring mitigation) across a large, multi-state area despite that most of the watersheds in the region likely do not experience high EECs.

The result of this higher resolution runoff assessment is that EPA reduced the number of species predicted likely to be adversely affected by Enlist from 148 to 19, and the number of critical habitats likely to be adversely affected from 86 to five, which would require producers to adopt mitigations to protect far fewer species where they are genuinely needed. Even in the draft IS, EPA took a higher resolution approach in determining which counties may experience higher runoff risk, suggesting this increased resolution approach would not be a difficult one for the Agency to adopt as a standard. There are other improvements EPA can adopt to its assumptions for predicting EECs in water, such as using real-world USDA and market data available to the Agency on percent of crop treated, percent area cropped, or real-world usage rates.

Another improvement EPA should consider is using more taxonomically appropriate indicator species to assess risks to species. Currently, EPA uses bees as the default surrogate for predicting

²⁷ Farruggia, Frank T. U.S. Environmental Protection Agency. Office of Chemical Safety and Pollution Prevention. March 10, 2023. *2,4-D Choline and Glyphosate Dimethylammonium: Tier 3 Refinement of 2,4-D Runoff Exposure to Wetland Plants and Revised Effects Determinations for Federally Listed Species for the Use of Enlist One and Enlist Duo on Genetically-Modified Enlist-Tolerant Cotton, Corn, and Soybean*. <https://www.regulations.gov/document/EPA-HQ-OPP-2021-0957-0034>

pesticide effects on non-target arthropods, such as crabs, beetles, and others. This is not an appropriate surrogate, as bees are often more likely to experience symptomology to pesticide exposures than other species, which will lead to more conservative effects findings than if EPA used more taxonomically appropriate surrogates.

All these refinements would allow EPA to more accurately predict where pesticide exposures may pose a genuine population-level risk to endangered species and critical habitat. The current unrefined approach unnecessarily assumes high levels of risk which will necessitate costly mitigation, despite that these mitigations may be unnecessary to protect species.

Statutory Considerations

One reason we encourage EPA to make the above refinements to its ESA risk assessment process is that we believe the Agency will create a legal vulnerability for itself if it fails to do so. As mentioned at the outset of this letter, we support EPA meeting all its legal obligations to ensure a more durable, predictable regulatory process for pesticides. Should EPA not comply with these responsibilities, we are concerned it may continue to leave pesticide registrations open to legal challenge, which does not provide the regulatory certainty we desire. Below are several statutory obligations we strongly urge the Agency to consider as it seeks to finalize the draft IS and integrate ESA mitigations into registration decisions.

Regarding ESA, the statute requires that when conducting biological assessments that federal agencies use the “best scientific and commercial data available.”²⁸ Failing to use USDA or commercial data available to EPA in lieu of unnecessarily conservative assumptions does not adhere to the law’s data requirements. Additionally, ESA requires that any measures needed to protect species be “reasonable and prudent.”²⁹ We are concerned that ESA mitigations that would impose restrictions costing individual operations millions of dollars to comply, threatening the economic viability of their farms, and jeopardizing their ability to use tools essential to protect their crops is unlikely to satisfy this important standard.

We are also concerned that if EPA does not adjust its approach by using the best scientific and commercial data available to the Agency, it may put EPA at odds with its obligations under the Administrative Procedure Act (APA). APA requires that agency actions are not “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”³⁰ However, using unduly conservative, worst-case-scenario predictions for ESA assessments, as EPA often does, is no less arbitrary and capricious than underestimating pesticide exposures. To ensure future registrations are also consistent with APA, we recommend EPA to conduct real-world, probabilistic predictions using the best scientific and commercial data available to the Agency.

Another ESA-related concern EPA should consider assessing is the ways in which pesticides benefit endangered species and their habitats. For example, Fish and Wildlife Service (FWS) has clearly stated that invasive species and urbanization are the number one and two threats, respectively, to endangered species.³¹ However, none of EPA’s ESA assessments to date consider how pesticides are being used to manage invasive species that pose a risk to species (consider the EAB example

²⁸ 16 U.S.C. § 1536(a)(2)

²⁹ 16 U.S.C. § 1536(d)

³⁰ 5 U.S.C § 706(2)(A)

³¹ U.S. Fish and Wildlife Service. Ecological Services Program. November 17, 2023. *Biological Opinion on the Registration of Enlist One and Enlist Duo Pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act*. P. 22-23. <https://www.regulations.gov/document/EPA-HQ-OPP-2021-0957-0047>

above) should those uses be restricted, or how urban encroachment may affect species if farms outside of urban areas are forced to sell cropland to developers because they are no longer able to productively farm on it due to their inability to manage pest pressures. Nor have they considered the ways in which pesticides enable conservation practices that help to protect species.

Further considering benefits, we disagree with EPA's determination in its response to comments for the Herbicide Strategy that the Agency may impose ESA-related restrictions prior to conducting pesticide risk and benefit assessments under FIFRA. ESA does not inherently grant EPA the authority to impose restrictions on agency actions prior to consultation with FWS or the National Marine Fisheries Service (NMFS). The only authority under which EPA may impose those restrictions on pesticide registrations is FIFRA, which requires the Agency to ascertain that a use poses "unreasonable adverse effects on the environment," considering both the risks and benefits, prior to restricting uses.³² The approach EPA detailed in its response to comments is not consistent with this requirement and we are concerned may create a vulnerability for the Agency.

Other concerns EPA should consider are related to the impacts of registrations containing these ESA mitigations on small business farmers, and whether those regulations are consistent with the Agency's obligations under the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act.³³ Under this statute, federal agencies are required to conduct analysis detailing how a regulation likely to have a significant economic impact will affect small businesses and other entities, as well as consider possible relief that could be afforded to small entities to minimize the impact of regulation. To our awareness, conducting RFA analysis is not a consistent practice for the pesticide program. However, given that these regulations are likely to significantly impact many small farms and other businesses, the Agency may consider exploring this potential vulnerability.

We are also concerned there may be constitutional concerns with EPA's approach to its ESA responsibilities. As described above, agricultural producers need insecticides to farm productively and sustainably. Many croplands in rural areas, where economic development is not feasible, are only suitable for agricultural uses. Should the IS or other ESA restrictions render these landowners unable to protect crops and effectively farm, it may deprive them of all economic viable use of their land. In these instances, without just compensation, the IS may be imposing regulatory takings and undermining the Fifth Amendment rights of the landowners. To avoid this potential concern, we recommend EPA ensure any restrictions amounting from the IS or ESA mitigations are not so stringent that they effectively prevent producers from using pesticides, potentially depriving them of the economic use of their farmland.

While we support EPA becoming compliant with its ESA responsibilities, it is not enough that EPA merely conduct assessments and impose ESA-related restrictions; the Agency's work must also be compliant with all its statutory obligations. We strongly urge EPA to consider the above legal requirements to ensure the Agency's final product is defensible and offers the certainty we and other stakeholders desire.

Conclusion

While we support EPA bringing its pesticide program into compliance with the Endangered Species Act, it is essential that the regulatory outcomes are viable for agriculture and maintain access to

³² 7 U.S.C § 136(bb)

³³ 5 U.S.C § 601-612

insecticides. Without retaining meaningful access to and use of these tools, individual farming operations and the customers we serve will be subject to billions of dollars in irreparable harm. Regrettably, we do not feel as if the draft IS, as proposed, satisfies these needs.

The draft IS would impose an exceedingly complex regulatory framework on producers that could require individual farming operations to invest hundreds of thousands to millions of dollars annually to bring their business into compliance. As troubling, the approach the Agency takes to assess the potential risks pesticides pose to endangered species and their habitats overstates those exposure risks. As a result, farmers may be obligated to implement these costly, burdensome requirements that could be entirely unnecessary to protect species from pesticides. We believe the Agency can do better, and we provide recommendations on how EPA can accomplish that outcome and make its framework more workable for agriculture.

Should the Agency not make the necessary improvements, we feel it could unfortunately place EPA at odds with many of its statutory obligations. Given that one of the primary purposes of undergoing ESA reforms was to bring the Agency into compliance with its legal requirements and mitigate the uncertainty inflicted by legal challenges, it would be regrettable if EPA continued to leave itself open to these vulnerabilities. We strongly urge EPA to address these susceptibilities to ensure that any final ESA requirements are legally defensible and provide the certainty both stakeholders and the Agency seek.

We appreciate the opportunity to comment and EPA's consideration of our feedback on how the Agency can meet its legal obligations, protect endangered species and their habitats, all while ensuring the resulting framework is workable for U.S. agriculture.

Sincerely,

African American Farmers of California
Agribusiness Association of Kentucky
Agricultural Council of Arkansas
Agricultural Retailers Association
Alaska Farm Bureau
American Agri-Women
American Cotton Producers
American Dairy Coalition
American Farm Bureau Federation
American Horse Council
American Pulse Association
American Seed Trade Association
American Society of Agronomy
American Soybean Association
American Sugar Alliance
American Sugar Cane League
American Sugarbeet Growers Association
AmericanHort
Aquatic Ecosystem Restoration Foundation
Arizona Cotton Growers Association
Arizona Crop Protection Association
Arizona Farm Bureau Federation
Arkansas Certified Crop Advisers

Arkansas Crop Protection Association
Arkansas Farm Bureau Federation
Arkansas Rice Federation
Arkansas Soybean Association
Associated Oregon Hazelnut Industries
Beet Sugar Development Foundation
Big Horn Basin Beet Growers Association
Big Horn County Sugar Beet Growers Association
Burley & Dark Tobacco Producers Association
California Alfalfa and Forage Association
California Apple Commission
California Association of Wheat Growers
California Blueberry Commission
California Citrus Mutual
California Cotton Ginners and Growers Association
California Farm Bureau
California Fresh Fruit Association
California Safflower Growers Association
California Seed Association
California Specialty Crops Council
California Tomato Growers Association
California Warehouse Association
Cherry Marketing Institute
Colorado Association of Wheat Growers
Colorado Farm Bureau
Colorado Livestock Association
Colorado Nursery and Greenhouse Association
Colorado Potato Legislative Association
Colorado Sugarbeet Growers Association
Council for Burley Tobacco
Council of Producers & Distributors of Agrotechnology
Crop Science Society of America
Delaware Farm Bureau
Far West Agribusiness Association
Florida Fertilizer & Agrichemical Association
Georgia Cotton Commission
Georgia Farm Bureau
Georgia Green Industry Association, Inc.
Georgia Urban Ag Council
Idaho Alfalfa Clover Seed Growers Association
Idaho Barley Commission
Idaho Eastern Oregon Seed Association
Idaho Farm Bureau Federation
Idaho Grain Producers Association
Idaho Hay and Forage Association
Idaho Hop Growers Association
Idaho Mint Growers Association
Idaho Noxious Weed Control Association
Idaho Oilseed Commission
Idaho Onion Growers' Association

Idaho Potato Commission
Illinois Soybean Growers
Indiana Farm Bureau
Indiana Soybean Alliance
International Certified Crop Adviser Program
International Fresh Produce Association
Iowa Farm Bureau
Iowa Soybean Association
Kansas Association of Wheat Growers
Kansas Cotton Association
Kansas Farm Bureau
Kansas Soybean Association
Kentucky Farm Bureau Federation
Kentucky Soybean Association
Louisiana Agricultural Consultants Association
Louisiana Farm Bureau Federation
Louisiana Nursery and Landscape Association
Malheur County Onion Growers Association
Malheur County Potato Growers Association
Maryland Farm Bureau
Massachusetts Association of Lawn Care Professionals
Massachusetts Farm Bureau Federation
Michigan Agri-Business Association
Michigan Asparagus Association
Michigan Bean Commission
Michigan Farm Bureau
Michigan Soybean Association
Michigan State Horticultural Society
Michigan Vegetable Council
Mid Atlantic Soybean Association
Midwest Food Products Association
Minnesota Association of Wheat Growers
Minnesota Crop Production Retailers
Minnesota Farm Bureau Federation
Minnesota Soybean Growers Association
Mint Industry Research Council
Mississippi Farm Bureau Federation
Mississippi Soybean Association
Missouri Farm Bureau
Missouri Soybean Association
Montana Agricultural Business Association
Montana Grain Growers Association
National Agricultural Aviation Association
National Association of Landscape Professionals
National Association of Wheat Growers
National Barley Growers Association
National Black Growers Council
National Christmas Tree Association
National Cotton Council
National Council of Farmer Cooperatives

National Onion Association
National Sunflower Association
NEBCO Beet Growers Association
Nebraska Agri-Business Association
Nebraska Farm Bureau Federation
Nebraska Soybean Association
Nebraska Sugarbeet Growers Association
Nevada Farm Bureau Federation
New Jersey Farm Bureau
New Jersey Nursery and Landscape Association
New Mexico Farm & Livestock Bureau
New York Corn & Soybean Growers Association
New York Farm Bureau
Nezperce Prairie Grass Growers Association
Nisei Farmers League
North American Blueberry Council
North Carolina Christmas Tree Association
North Carolina Farm Bureau Federation
North Carolina Grange
North Carolina Nursery & Landscape Association
North Carolina Soybean Producers Association
North Dakota Grain Growers Association
North Dakota Soybean Growers Association
Northharvest Bean Growers Association
Northeast Agribusiness & Feed Alliance
Northern Canola Growers Association
Northern Pulse Growers Association
Northwest Agricultural Cooperative Council
Ohio AgriBusiness Association
Ohio Farm Bureau
Ohio Soybean Association
Oklahoma Agribusiness Retailers Association
Oklahoma Agricultural Aviation Association
Oklahoma Certified Crop Advisers
Oklahoma Cotton Council
Oklahoma Farm Bureau
Oklahoma Seed Trade Association
Oklahoma Soybean Association
Oklahoma Wheat Growers Association
Olive Growers Council of California
Oregon Association of Nurseries
Oregon Cattlemen's Association
Oregon Dairy Farmers Association
Oregon Farm Bureau
Oregon Potato Commission
Oregon Seed Council
Oregon Wheat Growers League
Oregon Women for Agriculture
Oregonians for Food & Shelter
Pacific Northwest Canola Association

Pacific Seed Association
PennAg Industries Association
Pennsylvania Farm Bureau
Plains Cotton Growers, Inc.
Red River Valley Sugarbeet Growers Association
Rolling Plains Cotton Growers
Snake River Sugarbeet Growers Association
South Carolina Corn and Soybean Association
South Carolina Farm Bureau
South Dakota Agri-Business Association
South Dakota Association of Cooperatives
South Dakota Farm Bureau
South Dakota Farm Bureau Federation
South Dakota Soybean Association
South Texas Cotton & Grain Association
Southern Crop Production Association
Southern Idaho Potato Cooperative, Inc.
Southern Kanas Cotton Growers Coop
Southern Montana Sugarbeet Growers
Southern Rolling Plains Cotton Growers Association
Tennessee Corn Growers Association
Tennessee Farm Bureau Federation
Tennessee Soybean Association
Texas Corn Producers Association
Texas Farm Bureau
Texas International Produce Association
Texas Soybean Association
Texas Vegetable Association
Texas Wheat Producers Association
U.S. Beet Sugar Association
U.S. Canola Association
U.S. Durum Growers Association
USA Dry Pea & Lentil Council
Utah Farm Bureau Federation
Venture Dairy Cooperative
Virginia Agribusiness Council
Virginia Cattlemen's Association
Virginia Farm Bureau
Virginia Soybean Association
Washington Association of Wheat Growers
Washington Farm Bureau
Washington Friends of Farms and Forests
Washington Mint Growers Association
Washington State Dairy Federation
Washington State Potato Commission
West Virginia Farm Bureau
Western Agricultural Processors Association
Western Alfalfa Seed Growers Association
Western Plant Health Association
Western Sugar Cooperative

Wheatland Beet Growers Association
Wisconsin Potato & Vegetable Growers Association
Wisconsin Soybean Association
Wyoming Ag Business Association
Wyoming Farm Bureau Federation
Wyoming Wheat Growers Association