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August 6, 2023

Jan Matuszko, Director  
Environmental Fate and Effects Division  
Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460-0001

**RE: EPA-HQ-OPP-2023-0327**

Dear Ms. Matuszko:

The National Cotton Council (NCC) appreciates the opportunity to provide comments to the Environmental Protection Agency's Draft Plan, "Vulnerable Listed (Endangered and Threatened) Species Pilot Project: Proposed Mitigations, Implementation Plan, and Possible Expansion". In general, the NCC appreciates the magnitude of work accomplished by EPA in coordination with USDA's Office of Pest Management Policy (OPMP) and U.S. Department of the Interior's Fish and Wildlife Service (FWS) striving to comply with section 7(a)(2) of the Endangered Species Act (ESA). As noted in the introduction, "EPA must ensure that any action authorized, funded, or carried out by the Agency (referred to as an "agency action") is not likely to jeopardize the continued existence of federally threatened and endangered (listed) species or destroy or adversely modify designated critical habitat. In fulfilling the requirements of ESA section 7(a)(2), EPA must use the best scientific and commercial data available. When appropriate for the agency action, EPA consults with the Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (hereinafter the Services)."

The NCC is the central organization of the United States cotton industry. Its members include producers, ginner, cottonseed processors and merchandizers, merchants, cooperatives, warehousemen and textile manufacturers. A majority of the industry is concentrated in 17 cotton-producing states stretching from California to Virginia. U.S. cotton producers cultivate between 10 and 14 million acres of cotton with production averaging 12 to 20 million 480-lb bales annually. The downstream manufacturers of cotton apparel and home furnishings are located in virtually every state. Farms and businesses directly involved in the production, distribution and processing of cotton employ more than 115,000 workers and produce direct business revenue of more than \$22 billion. Annual cotton production is valued at more than \$5.5 billion at the farm gate, the point at which the producer markets the crop. Accounting for the ripple effect of cotton through the broader economy, direct and indirect employment surpasses 265,000 workers with economic activity of almost \$75 billion. In addition to the cotton

fiber, cottonseed products are used for livestock feed and cottonseed oil is used as an ingredient in food products as well as being a premium cooking oil.

The NCC's diverse membership shares the common interest for successful production and sale of U.S. cotton products. Imbedded in that interest is the ability (both in operational practice and affordability) to economically produce cotton when challenged by forces of nature, utilizing crop protection tools, when necessary, . The NCC's membership are collectively impacted by EPA's actions, including agency actions regarding ESA compliance. The NCC appreciates the opportunity to provide the following comments from the perspective of the agricultural pesticide product user community. The NCC respects the role of EPA as well as the Services as prescribed by FIFRA and ESA. The NCC acknowledges the massive burden currently faced by both EPA and the Services with potential legal allegations from multiple stakeholders' perspectives. However, we must be reminded of the necessity to produce food and fiber for a growing population, and the current necessity of pesticide products to accomplish the vast demand.

It is imperative that both species protection and use of crop production products are supported by the best scientific approach. For that reason, EPA must be open to considering refinements to processes, tools, and information to expedite reliable assessments of species protection and product use. EPA and the Services should encourage registrants to aid in the development of scientifically valid processes, vetted by the scientific community, that would enhance the efficiency of iterative analyses and effective mitigation identification as needed. EPA and the Services should be supporting a position of "all hands-on deck" with other federal agencies to utilize the best science and technology available to comply with FIFRA and ESA.

### **What are the producer alternatives?**

The NCC is committed to work with EPA, OPMP, and FWS to continually enhance compliance with FIFRA and ESA. In doing so, the NCC urges more recognition of consequences resulting from increased restrictions to crop protection products. These consequences have direct impacts on species protection.

For example, requiring an in-field buffer for the use of herbicides forces producers to identify alternative weed control methods. In some instances, the alternative control may be accomplished by overlay of multiple modes of action. This does represent an increase cost to producers, but it also requires an increase in number and applications of herbicides on the in-field buffer. Alternatively, and if products are not sufficient for control, producers will either allow weeds to grow and sacrifice the production area or revert to tillage practices – thereby increasing sediment runoff potential. The loss of

production area will, in many cases, be significant enough to eliminate economic production feasibility for the field. Fields that are no longer profitable for production practices offer alternative uses such as urbanization or solar energy production. Loss of agricultural production is likely to be more detrimental to species protection.

Similarly, fields, with buffers that allow for weed growth, have significant negative effects on crop production, especially long term. Such areas promote the production and spread of weed species, increase source habitat for pest species, increase the need for pest intervention, and promote the evolution and population expansion of resistant pest genotypes.

Producers are currently faced with multiple damaging pests not controlled with one mode of action product. Embedded within the complex pest management system is the necessity to rotate pesticide modes of action (relevant to the specific pests) to manage the development of resistant genotypes. While complying with these pest management strategies, producers are also eliminating surviving weeds as part of resistance management strategies. Further restricting modes of action will directly impact product longevity and force producers to alter weed management operations, which will likely include tillage. The current direction of site-specific mitigations impacts and promotes the changes in closest proximity to listed species. The NCC supports protection of listed species and raises these concerns to demonstrate a need to consider changes resulting from mitigations that could be more detrimental to species survival.

### **What are the costs to producers?**

EPA has outlined a “Workplan” and “Workplan Update” describing actions being taken under FIFRA to develop a Proposed Interim Decision (PID) that would enhance protection of all species, including Endangered Species. Admittedly, the Services must eventually finalize a Biological Opinion (BiOp) that will address their acceptance or proposed alternative measures related to EPA’s PID prior to EPA finalizing the registration decision. However, EPA’s actions under FIFRA should be accompanied with a risk-benefit analysis that would report the costs to producers associated with the mitigations being proposed for species protection. Although these costs may not be relevant to the FWS-ESA activities, they are relevant to the FIFRA process and should be documented.

### **Are Conservative Assessments introducing speculation beyond “the best scientific and commercial data available.”?**

Throughout the document, EPA makes statements acknowledging a conservative assessment for generalized use.

Because the pilot species are some of the most vulnerable to potential effects, EPA designed the mitigation measures to be broad enough that the mitigations protect the pilot species while being implemented efficiently and effectively, and clear enough that pesticide users can understand and apply the use-limitation instructions. EPA expects that the proposed mitigations would apply to the majority of conventional outdoor-use pesticides<sup>3</sup>. To efficiently and effectively implement mitigations for these pilot species, EPA is proposing one set of mitigations for all conventional outdoor-use pesticides, regardless of their differences in exposure or potential effects.

Another primary goal of the Vulnerable Species Pilot is to help increase the efficiency of the pesticide consultation process with FWS because FWS has authority over the listed species in the Vulnerable Species Pilot.

EPA identified mitigations that are intended to apply broadly to conventional pesticide active ingredients that are applied outdoors. EPA designed the mitigations to be as general as possible so that they apply to groups of pesticides and species, rather than only certain pesticides or species.

The avoidance and minimization measures proposed for the pilot species are intended to reduce the likelihood of future jeopardy/adverse modification determinations and to minimize potential take for the pilot species from the ongoing use of registered conventional pesticides.

EPA used an iterative process to develop the proposed mitigations by considering the species effects and exposures from representative pesticides.

EPA used standard methods and models to develop conservative analyses of the potential effects of these pesticides on the pilot species and their prey, pollination, habitat and/or dispersal.

EPA relied upon this qualitative approach (order of magnitude difference in exposure and effects) because it used a deterministic, conservative approach.

EPA acknowledges that this is a broad approach with many strict mitigations, but it is important to note that this pilot project is applied to a relatively small area and is intended to protect the most vulnerable species. These mitigations are not intended to be applicable for small scale spot-treatment applications, indoor uses, or applications in residential areas.

In establishing PULAs, EPA's default is to use the species' ranges to identify avoidance and minimization areas.

The second type of mitigation is minimization of exposures from applications within areas that could result in off-site transport (through spray drift or runoff/erosion) to the areas where the species occurs.

Minimization areas for the purpose of this pilot project are proposed to be within species range or designated critical habitat or within extensions surrounding the species locations. EPA is proposing a 2600 ft extension area around the range or designated critical habitat to address spray drift that may come in from outside the species range or designated critical habitat (e.g., fields just adjacent to the species habitat but outside the range or designated critical habitat). EPA is proposing this distance as it is the farthest extent that pesticide spray drift is estimated to transport and, therefore, accounts for drift that may occur from applications adjacent to the species habitat that would otherwise contribute exposures to the pilot species.

EPA used standard toxicity data available for the representative pesticides to assess potential direct effects to the listed pilot species as well as potential effects to the prey, pollination, habitat and/or dispersal (PPHD) of the pilot species. **Table 7** presents the taxa used to represent direct effects and PPHD. For animals, EPA used standard acute toxicity endpoints (median lethal dose or concentration, LD<sub>50</sub> or LC<sub>50</sub>). When assessing potential direct effects to the pilot animal species, EPA used the available slope information to extrapolate down to the 10% mortality level (*i.e.*, LD<sub>10</sub> or LC<sub>10</sub>). EPA used the ten percent mortality to represent the background mortality level in test organisms and thus represent a no effect level. For plants, EPA used IC<sub>25</sub> (25% growth inhibition concentration) for terrestrial species and IC<sub>50</sub> values for aquatic species because these are the toxicity values generated in standard studies submitted by registrants. When multiple toxicity endpoints were available for the same taxon, EPA used the most sensitive, reliable, and scientifically valid value. For terrestrial plants, EPA used the 5<sup>th</sup> percentile IC<sub>25</sub> value of available species sensitivity distributions for herbicides. **Tables 8 and 9** include the toxicity endpoints for the representative pesticides and taxa relevant to the pilot species. These toxicity data are from recent EPA assessments for the representative pesticides. **Section 9** includes citations for the specific assessments used in the analysis.

For each pesticide assessed, EPA used Environmental Exposure Concentrations (EECs) for both aquatic and terrestrial environments, using the maximum application rates and scenarios. EECs are from EPA's standard models used in ecological risk assessments.<sup>23</sup> EPA also considered different dietary exposures to terrestrial animals using upper bound and mean Kenaga<sup>24</sup> values incorporated into the T-REX model. EPA used the Pesticide In water Calculator to estimate exposures that bound small and medium sized water bodies.<sup>25</sup> EPA used edge of field

runoff/erosion concentrations as an upper bound of exposures in small water bodies (e.g., vernal pools) and the standard farm pond to represent exposures in medium sized water bodies. EPA's EECs represent the highest value predicted on a single day out of 10 years. For plant exposures, EPA used EECs for drift and runoff/erosion that were generated using the Plant Assessment Tool.<sup>26</sup> PAT v2.0 and v.2.8 were used to generate EECs. Table 10 presents the maximum application rates used to assess exposures of the representative pesticides. Tables 11 and 12 include the terrestrial and aquatic EECs (respectively) used to derive RQs for animals.

EPA used EECs from previous assessments. Since the time of the assessments, there may have been changes to pesticide labels that could affect EECs as a result of FIFRA (e.g., registration review actions) or ESA (e.g., ongoing consultations) activities; however, EPA screened EECs from these assessments to try and account for these changes when considering relevant exposure concentrations. The EECs used in this exercise are provided to give a range of potential exposure values that could result from use of a variety of pesticides but may not necessarily reflect recent changes to labels. In selecting relevant EECs for the pesticides from risk assessments, EPA tried to focus on uses that were still relevant to current labels for these pesticides, if they had changed, and focused on use sites that overlap with the vulnerable species locations.

As described above, for some of the representative pesticides, spray drift exposures for direct effect to the vulnerable pilot species of plants (Table 16) and terrestrial insects (Table 13) may be higher. Therefore, EPA is proposing different spray drift mitigations that include larger buffer distances for vulnerable pilot species of terrestrial invertebrates (Poweshiek skipperling, Rusty patch bumble bee, Taylors checkerspot, American burying beetle) and plants (Lake Wales Ridge plants, Mead's milkweed, Leedy's roseroot, Okeechobee gourd, Palmate-bracted bird's beak, White Bluffs bladderpod). Tables 19-22 summarize the lines of evidence considered for the evaluation of the proposed mitigations for the terrestrial animals and plants.

The NCC refers EPA to the recent (June 16, 2023) Opinion of the U.S. Court of Appeals for the District of Columbia Circuit (USCA Case #22-5238, Document #2003771, p.27) ruling "Statutory test and structure do not authorize the Service to "generally select values that would lead to conclusions of higher, rather than lower, risk to endangered or threatened species" whenever it faces a plausible range of values or complementing analytical approaches. The statute is focused on likely outcome, not worst-case scenarios. It requires the Services to use the best available scientific data, not the most pessimistic. The word "available" rings hollow if the Services may hold up an action agency by

merely presuming that unavailable data, if only they could produce it, would weigh against the agency action.”

Further the Court stated (p.28) “The presumption in favor of the species is, like an adequate margin of safety, a blunt tool. The presumption significantly expands the Service’s veto power, prevents the agency from “paying attention to the advantages and disadvantages” of the action, and invites unnecessary economic dislocation wrought by worst-case thinking. *Michigan v. EPA*, 576 U.S. 743,753 (2015).”

The NCC asserts EPA has indulged in multiple worst-case scenario assumptions, each providing extra precaution to avoid species affect. In light of the courts opinion above, the NCC urges EPA to revise the asserted mitigation needs based on the best available scientific data, not worst-case scenarios. For example, the use of the highest labeled rate at the lowest possible retreatment intervals is not supported by the best scientific and commercial data available. Similarly, selecting sensitive toxicity endpoints from “representative” chemistries to assert harm for multiple chemistries is not justified by scientific data. Generating water concentration values that are contrary to water monitoring data does not make use of the best scientific and commercial data. The combined effect of conservative assumptions used throughout the stepwise analysis clearly provides extraordinary bias, and likely costly unnecessary bias, in favor of the species – which reflects the same unlawful bias identified by the court in *Maine Lobstermen’s Association vs. National Marine and Fisheries Services*, et. al.

### **Proposed Mitigations**

The NCC appreciates EPA’s consideration to allow an exception to avoidance of applications to the habitat of listed species when applicators get input and approval from local FSW experts. The NCC believes there are opportunities for individual growers, collective grower areas, etc. to work with the Services to develop pesticide use plans and urges EPA to provide language that would not disrupt such coordination. For instance, ensure species-directed mitigations can be addressed separately between producers and Services. This could include additional exceptions arriving from local consultations and may include offsets not considered by EPA. However, EPA should ensure such engagements provide relief of relevant mitigations.

The NCC appreciates EPA’s consideration of species habitat and life cycle which directly influences potential exposure. The NCC encourages EPA to continue to refine potential exposure with greater clarity of “potential stressor” resulting in a jeopardy finding. Many of the listed species identify pesticides not as the primary concern, but a potential stressor. The primary concerns have been the drivers to reduce the population to a level

of concern. However, “potential stressor” embraces a bias for the species and must be more clearly linked to data demonstrating an impact to the species population.

EPA has proposed to utilize Bulletins to convey geographic-specific restrictions for pesticide product uses. Bulletins would be generated and downloaded from EPA’s website “Bulletins Live! Two”, (BLT). The use of BLT would allow EPA the ability to identify geographic sites near the species and/or critical habitat and range. Additionally, the use of BLT would allow EPA a rapid mechanism to change restrictions to protect species.

1. The NCC reminds EPA of its FIFRA obligation to 1) determine registration eligibility of a pesticide and 2) review registration eligibility every 15 years. Special circumstances are necessary to trigger agency review otherwise. With this in mind, EPA’s Federal Action, i.e. registration eligibility decision, should be solid for 15 years – including the ESA consultation. Bulletins should not be altered otherwise unless FIFRA special circumstances are triggered. The NCC encourages EPA to recognize such legal limitations authorized by law.
2. The NCC appreciates the efforts to limit restrictions to the applicable location but reminds EPA of previous comment to refine and analysis based on available scientific and commercial data without bias. The NCC believes such efforts will relieve many producers from unnecessary restriction and preserve vast quantities of agricultural produce.
3. The NCC reiterates comments previously provided to EPA regarding pesticide users’ access to legally obligated material. BLT must be accessible using multiple devices, such as cell phones, tablets, and computers and their various operating and internet systems. The majority of affected stakeholders reside in rural America with limited, if any, cellular and internet service. While national efforts are underway to enhance these services, consideration of these limitations must be given prior to formulating legal obligations to which they cannot comply.

EPA has proposed two approaches for defining where mitigations would be applied: 1) avoidance areas where the species is most likely to occur based on specific and refined information from FWS, and 2) minimization of exposure from applications within areas that could result in off-site transport to areas where the species occurs. EPA notes “The second approach is when a range likely includes areas that are not habitat for the species.”

1. The NCC requests clarification of the definition being applied to “range” if the area is not habitat for the species. The NCC urges alternate terminology that is less ambiguous and provides clear distinction of area encompassed.



2. The NCC requests clarification of the determination of “habitat”. Both of the preceding terms lead to bias for species protection if applied/interpreted incorrectly. For example, in *Weyerhouser Co. vs US Fish and Wildlife Services* (2018) the US Supreme Court stated that an area has to be designated habitat prior to being considered critical habitat. The NCC is requesting clarification of how (by whom) the land was declared habitat. Clarity is essential to consider necessity of the proposed mitigations and avoid future abuses that may result in the loss of more productive farmland.

The NCC appreciates EPA’s recognition of environmental benefits derived from conservation practices which reduce sediment and water run-off. Similarly, the NCC appreciates EPA’s recognition that hooded sprayers dramatically reduce spray drift. The NCC desires to continue to work with EPA to identify and support practical measures to improve pesticide stewardship management and compliance with the legal requirements of both FIFRA and ESA.

The NCC appreciates the opportunity to provide these comments to the Environmental Protection Agency’s Draft Plan, “Vulnerable Listed (Endangered and Threatened) Species Pilot Project: Proposed Mitigations, Implementation Plan, and Possible Expansion”.

Regards,

A handwritten signature in black ink, appearing to read "Steve Hensley". The signature is fluid and cursive, with the first name "Steve" and last name "Hensley" clearly distinguishable.

Steve Hensley  
Senior Scientist, Regulatory and Environmental Issues