6WASHINGTON REPORT

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Lee Van Wychen

Weed Science Society Presidents Visit Washington DC.

Pictured (L to R): ***Wes Everman****, NC State, NEWSS President****; Curtis Rainbolt****, BASF, WSWS President;* ***Carroll Moseley****, Syngenta, WSSA President;* ***Eric Castner****, FMC, SWSS President; and* ***Reid Smeda****, University of Missouri, NCWSS President*

During the week of April 17, the presidents from the four regional weed science societies and WSSA traveled to Washington DC to advocate on behalf of weed science policy initiatives and help WSSA achieve its mission of promoting research, education, and awareness of weeds in managed and natural ecosystems. Our primary mission during the week was meeting with the president's elected members of Congress and their staff from their home states. We discussed an array of weed science related topics, including:

- Support $8 billion in mandatory agricultural research funding in the next Farm Bill. U.S funding peaked in 2002 and has declined by 1/3 since then, hitting the lowest levels since 1970. While U.S. investments decline, China's funding for ag research has grown to more than $10 billion – **double of what the U.S. currently spends**. Current U.S. ag research funding is just under $5 billion and most of that is discretionary funding that relies on year-to-year appropriations from Congress.

- Support USDA-NIFA IR-4 Project funding at $25 million in FY 2024. The IR-4 Project was funded at $15 million in FY 2023.
    - There is a phenomenal need for specialty crop protection products to help feed the world. The IR-4 Project was established in 1963 by USDA to conduct research and develop the data needed to facilitate the registration of crop protection products, including reduced risk and bio-based pesticides, for minor use crops such as fruits, vegetables, herbs, spices, ornamental plants and other horticultural crops. The IR-4 Project provides an incredible return on investment as it contributes $8.97 billion to the annual U.S. GDP.

- Support the USDA-NIFA Crop Protection and Pest Management (CPPM) program at $25 million in FY 2024. The CPPM program was funded at $21 million in FY 2023.

- The CPPM program is a highly effective competitive grant program that tackles real world weed, insect, and disease problems with applied solutions through the concepts of integrated pest management (IPM). The CPPM also funds the Regional IPM Centers and Extension IPM programs.

- Amend the definition of a "plant pest" in the Plant Protection Act so that it includes noxious weeds and invasive plants. Currently, only "parasitic plants" are listed in the definition of "plant pest" (7 USC 104, S.7702 – Definitions, (14) Plant Pest, (C)).
    - USDA-APHIS receives almost $400 million per year in their Plant Health account to prevent the introduction and spread of "plant pests" in the U.S., but only a fraction goes toward weed prevention and surveillance. One example is their "Plant Pest" and Disease Management and Disaster Prevention (PPDMDP) program,, which directs $75 million a year to state governments, universities, non-profit institutions, industry, and tribal nations – to support projects that protect specialty crops, nursery systems, forestry, and other agricultural production systems and natural resources from harmful and exotic "plant pests." Very few of the 300+ "plant pest" projects supported by the PPDMDP involve noxious weeds or invasive plants.

The weed science society presidents also attended a number of other events and receptions while on Capitol Hill. This included a House Ag Committee hearing with EPA Administrator Michael Regan. This was the first time an EPA Administrator testified to the House Ag committee since 2016. They also attended a Senate Ag Committee hearing to examine Farm Bill policy, focusing on making conservation programs work for farmers and ranchers.

Off the Hill, they met with the American Soybean Association and attended the National Coalition for Food and Agricultural Research (NCFAR) board of directors meeting, which featured a lively discussion of agriculture research priorities in the next Farm Bill. They also attended part of the CropLife America (CLA) – Responsible Industry for Sound Environment (RISE) Spring Regulatory Conference where the keynote speaker was Rod Snyder, Senior Advisor for Agriculture to EPA Administrator Regan.

Another highlight of the CLA RISE Spring Conference was the retirement reception for Ray McCallister. He is a lifetime weed scientist and a member of WSSA's Science Policy Committee. Ray is highly regarded here in DC for his expertise on pesticide regulatory policy. He semi-retired from CLA on April 1 after 33 plus years of service. Ray's contact info is (202-577-6657) and rsm6consulting@gmail.com. Congratulations Ray!

Many thanks to presidents' Carroll Moseley, Reid Smeda, Wes Everman, Eric Castner, and Curtis Rainbolt for their professionalism and leadership during the week. I can assure you that the national and regional weed sciences are in good hands! I'd also like to thank them for taking the time out their busy schedules to travel to DC.

USDA Announces New USDA NIFA Director

On April 24, USDA announced the appointment of Dr. Manjit K. Misra as the new Director of the National Institute of Food and Agriculture (NIFA). Dr. Misra started new role on Monday, May 8, 2023.

Prior to joining USDA, Dr. Misra served as a Professor of Agricultural and Biosystems Engineering at Iowa State University. For more than 30 years, he was Director of the university's Seed Science Center. The center has administered the National Seed Health System, authorized by USDA APHIS since 2001. Dr. Misra also was founding Director of Iowa State's Biosafety Institute for Genetically Modified Agricultural Products.

In 2012, Dr. Misra was appointed Chair of the USDA National Genetic Resources Advisory Council (NGRAC), a position he held until 2017. Misra has served on more than 60 local, national, and international boards and committees. These include the Steering Committee for the Food and Agriculture Organization's (FAO) International Conference on Biotechnology, the Scientific Advisory Council of the American Seed Research Foundation, the Board of Directors of the Iowa Seed Association, the Iowa Crop Improvement Association, and the First the Seed Foundation.

Dr. Misra earned a Bachelor of Science in Agricultural Engineering in India, a Master of Science and a Doctor of Philosophy in Agricultural Engineering at the University of Missouri-Columbia. He is a researcher with 137 publications and an innovator with ten patents. During his tenure as the Director of the Seed Science Center, the faculty and staff conducted seed programs in 79 countries, including 34 countries in Africa.

Support for FY 2024 Appropriations and Farm Bill

Since January, the national and regional weed science societies have signed onto five ag research coalition letters that have been submitted to Congress regarding the Farm Bill and the FY 2024 budget. Current requests for the FY 2024 budget include:

- Provide $2.080 billion for the USDA NIFA research, providing increased support for the ag research capacity programs such as the Hatch Act and Smith Lever Act that are fundamental to the extramural research, education, and Cooperative Extension system. This includes:
    - $300 million in FY 2024 for the Hatch Act account, which supports 1862 land-grant university federal - state partnerships
    - $108 million in FY2024 for the Evans-Allen account to provide capacity funding for food and agricultural research at the 1890 land-grant universities and Tuskegee University
    - $46 million to support McIntire-Stennis Cooperative Forestry research, which investigates carbon sequestration, the development of bio-based products, and the prevention of forest fires
    - $420 million in Smith-Lever3(b) and 3(c) funds to support the Cooperative Extension System

    - $88 million for the Extension Services of 1890 land-grant universities
    - $17.5 million in FY2024 for Tribal Colleges Extension
    - Provide $500 million in funding for the Agriculture and Food Research Initiative (AFRI), USDA's premier competitive research program.

- Provide $500 million in funding for the Research Facilities Act
    - A 2021 Association of Public and Land-Grant Universities (APLU) report found that 70% of research facilities at US public agricultural colleges are at the end of their useful lives, with **$11.5 billion in deferred maintenance**. The Research Facilities Act allows for the construction of modern facilities at colleges that support agricultural research, which will increase pest and disease preparedness and the use of advanced technologies nationwide.

- Provide $1.95 billion for the Agricultural Research Service (ARS)
    - As the USDA's principal in-house research agency, ARS is one of the only funding sources available for long-term agricultural research. The ARS labs and research sites foster synergistic research collaborations across scientific disciplines and geographic locations. This funding would also help address ARS infrastructure improvements critical to carrying out its research responsibilities.

- Provide at least $50 million in funding for the Agriculture Advanced Research and Development Authority (AGARDA).
    - Advanced research agencies have been effectively deployed in defense (DARPA), energy (ARPA-E), and health (ARPA-H) to tackle the biggest challenges facing those areas in novel and groundbreaking ways. AGARDA was established in the 2018 Farm Bill and modeled after DARPA, ARPA-E, and ARPA-H. When funded, AGARDA will foster research, development, and technology transfer, resulting in significant benefits across the US food and agriculture value chain.

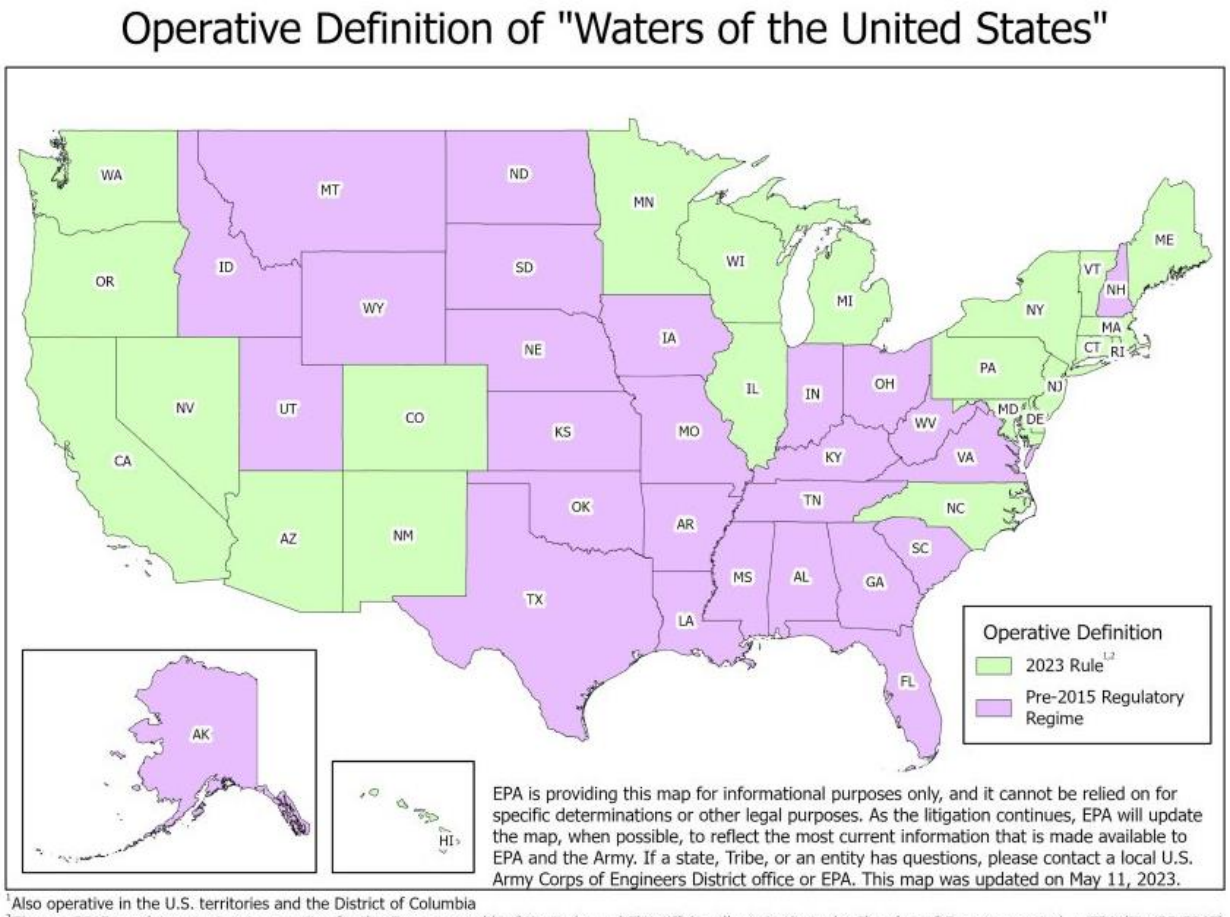
Supreme Court Rules on Waters of the United States

The US Supreme Court released its opinion on May 25 in *Sackett v. EPA* and ruled in favor of the Sacketts. All **nine members of the court rejected** the federal government's "**significant nexus**" test, which was crafted by former Justice Anthony Kennedy in the 2006 *Rap*anos decision. In other words, the "significant nexus test" is no longer an appropriate measure to determine a Water of the United States (WOTUS). Although there was a 5-4 split over what the test should be, not one justice attempted to defend "significant nexus" as an appropriate test.

The Court held that for a wetland to qualify as a WOTUS and be subject to federal regulation, there must be a **continuous surface connection** to a waterbody. Justice Alito's majority opinion said "adjacent" wetlands have to be close enough to other waters covered by the Clean Water Act (CWA) as to be indistinguishable. It also said the "significant nexus test" results in an unchecked definition of WOTUS which means that a staggering array of landowners are at risk of criminal prosecution or onerous civil penalties.

Justice Brett Kavanaugh, in the minority opinion joined by Justices Sonia Sotomayor, Elena Kagan and Ketanji Brown Jackson, said the majority engaged in a rewriting of the law by interpreting "adjacent wetlands" to mean "adjoining." Kavanaugh, however, noted that in 1977, Congress added "adjacent" wetlands to the definition of WOTUS in the law.

Over the history of the CWA, the Army Corps has adopted a variety of interpretations of its authority over wetlands – some more expansive and others less expansive. However, the Army Corps has always included in the definition of '**adjacent wetlands'** not only wetlands adjoining covered waters but also those wetlands that are separated from covered waters by a manmade dike or barrier, natural river berm, beach dune, or the like. Kavanaugh argued that "adjacent wetlands" is a broader category than "adjoining wetlands."



[1]Also operative in the U.S. territories and the District of Columbia

[2]The pre-2015 regulatory regime is operative for the Commonwealth of Kentucky and Plaintiff-Appellants in Kentucky Chamber of Commerce, et al. v. EPA (No. 23-5345) and their members (Kentucky Chamber of Commerce, U.S. Chamber of Commerce, Associated General Contractors of Kentucky, Home Builders Association of Kentucky, Portland Cement Association, and Georgia Chamber of Commerce).

EPA is expected to release post-Sackett guidance soon. However, as a result of on-going litigation, 27 states (in purple) should use the **pre-2015 regulatory rule** where WOTUS are:

1. Traditional interstate navigable waters
2. Relatively permanent bodies of water connected to traditional interstate navigable waters

3. Wetlands that have a continuous surface connection with either (1) or (2)

The May 25th WOTUS decision in *Sackett v EPA* is also another sign that the Supreme Court may reverse the **Chevron doctrine**. The Chevron doctrine is an administrative law principle that compels federal courts to **defer to a federal agency's interpretation** of an ambiguous or unclear statute that Congress delegated to the agency to administer. The principle derives its name from the 1984 U.S. Supreme Court case *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc*. The Supreme Court has already signaled its concern for agency interpretations of existing law, ruling in a case last year that EPA exceeded its authority in regulations designed to curb greenhouse gas emissions from power plants.

Finally, the Supreme Court also affirmed that states have the "primary" responsibility to prevent water pollution. Under the CWA, states can get EPA authorization to take over wetlands permitting. which is generally handled by the Corps of Engineers. Three states currently have such authority – New Jersey, Michigan and Florida.

LSU and Army Corps of Engineers Host Aquatic Weed Tour in Louisiana

Touring Dr. Chris Mudge's mesocosm research trials on giant salvinia at LSU. Pictured (L to R): ***Kristy Crews****, Product Manager, EPA Office of Pesticide Programs (OPP) Registration Division (RD), Fungicide Branch;* ***Jessica Post****, Economist, EPA OPP Biological and Economic Analysis Division,* ***Francisco Llarena-Arias****, Environmental Protection Specialist, EPA OPP RD, Fungicide and Herbicide Branch;* ***Chris Mudge****, Research Biologist: U.S. Army Engineer Research & Development Center and Adjunct Professor: LSU School of Plant, Environmental & Soil Sciences;* ***Jeremy Crossland****, US Army Corps of Engineers, Land Uses and Natural Resources Program Manager; and* ***Lee Van Wychen****, WSSA Executive Director of Science Policy.*

During the week of June 5, I had the chance to tour Dr. Chris Mudge's aquatic weed research trials at LSU along with staff from the EPA and Army Corps of Engineers. We also got to explore

the different aquatic weed problems they face in the Atchafalaya National Wildlife Refuge (NWR) and Lake Henderson. The Atchafalaya NWR is approximately 44,000 acres and encompasses Lake Henderson, which was formed by man-made levees in the 1930's and serves as a relief outlet for the Mississippi River. The elevation of Lake Henderson is set at 9 feet above mean sea level (MSL), but can range from 6 feet MSL to 18 feet MSL. From August through October, the lake is lowered to 6 feet MSL. These draw-downs expose the lake bottom, which helps to control aquatic plant infestations like water hyacinth, hydrilla, giant salvinia and Cuban bulrush.

I would like to send a special thank you to Dr. Mudge and his staff for organizing the tour and sharing their knowledge and expertise on aquatic weed management. It takes a lot of work to set these tours up, especially for aquatic weeds where you have to line up airboats to tour some of the swamps and bayous. We got some unique insights into the aquatic weed management challenges faced by the Louisiana Department of Wildlife and Fisheries and Army Corps of Engineers.

Touring Belle River in the Atchafalaya National Wildlife Refuge about 30 miles west of Baton Rouge, LA. *Dr. Chris Mudge attempts to drive his boat through an untreated area full of giant salvinia. Note: behind us is open water that has been treated by the Louisiana Department of Wildlife and Fisheries.*

<u>Weed Science Societies Support Agricultural Labeling Uniformity Act (HR 4288)</u>

Below is a support letter for H.R. 4288, the Agricultural Labeling Uniformity Act that was sent to Congressional leaders. This is a bipartisan bill sponsored by Reps. Dusty Johnson (R-SD) and Jim Costa (D-CA) regarding FIFRA pesticide labeling uniformity. The six national and regional weed science societies endorsed the letter (below) along with 355 other signers.

> *We write to express our great concern with recent misinterpretations of long-standing policy regarding the regulation and labeling of pesticide products, as some states have begun to regulate pesticides in a manner contradicting decades of scientific guidance from*

the Environmental Protection Agency (EPA). Lack of certainty on EPA-approved, science-based nationwide labels will erode access to current and future pesticides, threatening crops and grower incomes, conservation practices, public health, vital infrastructure, and ultimately raise food prices for families amidst record-high inflation.

Growers and users need reaffirmation from Congress that while ***states have authority to regulate the sale and use of pesticides within their jurisdiction, they cannot impose labeling or packaging requirements in addition or different from the scientific conclusions of the EPA****.*

To that end, we support and urge Congress to enact ***H.R. 4288, the Agricultural Labeling Uniformity Act****, bipartisan legislation which would reaffirm federal pesticide labeling uniformity and prevent state and local governments from adopting inconsistent labeling or packaging which would disrupt commerce and access to these vital tools.*

EPA Releases New Interactive Maps of Data Used in Endangered Species Act Assessments

The EPA is making the geographic data used to conduct Endangered Species Act (ESA) assessments for pesticides publicly available for the first time via interactive maps. These data are not new. Rather, EPA is making existing data broadly accessible and providing a new tool to help users access the data. The maps also show which crops are grown near these species and habitats, which can help users determine which pesticides might be used in these areas. EPA relies on the Fish and Wildlife Service and National Marine Fisheries Service (the Services) for information on the biology and location of listed species. As the Services continue to learn more about where some listed species are likely located, information will be updated and refined in the maps.

Prior to this, EPA was technologically unable to release all its ESA Geographic Information System (GIS) data because of the amount of data involved, but advances in technology have allowed EPA to overcome this problem. The maps allow anyone to access the GIS data online, and are particularly useful for federal, state, and local governments, tribal partners, environmental organizations, and pesticide registrants who want to conduct their own endangered species analysis.

Users will have access to information that may be incorporated into future ESA evaluations. EPA will update the spatial data it uses for its ESA analyses on a regular basis and will post updates as they occur. Visit EPA's website to learn more about these new maps and how to use them.

EPA Did Not Find PFAS in Pesticide Products Tested

On May 30, EPA released a summary of the laboratory analysis of 10 pesticide products reported to contain per- and polyfluoroalkyl substances (PFAS) residues. **EPA did not find any PFAS in the tested pesticide products**, differing from the results of a published study in the Journal of Hazardous Materials. EPA also released its newly developed and validated analytical methodology used in the testing process alongside the summary of its findings. EPA is confident

in the results of this newly released method, which is specifically targeted to detect the presence of PFAS in pesticide products formulated with surfactants.

Since learning about potential PFAS contamination in a small number of mosquitocide products in September 2020, EPA has taken a number of steps to address this issue. This includes releasing data in March 2021 that preliminarily determined that PFAS in those specific products was most likely formed from a chemical reaction during the container fluorination process which then leached into the pesticide product, releasing another study in September 2022 testing the leaching potential of PFAS over a specific time into test solutions packaged in different brands of HDPE fluorinated containers, and notifying manufacturers (including importers), processors, distributors, users, and those that dispose of fluorinated HDPE containers and similar plastics that the presence of PFAS formed as a byproduct in these containers may be a violation of the Toxic Substances Control Act.

Following that notification, the Department of Justice, on behalf of EPA, filed a complaint against Inhance, the company that manufactured the plastic mosquitocide containers in which PFAS was found, for its failure to comply with TSCA's notice, review, and determination requirements prior to manufacture.

As a continuation of these ongoing efforts, EPA has completed its verification analysis of a study published in September 2022 in the Journal of Hazardous Materials entitled "Targeted analysis and Total Oxidizable Precursor assay of several insecticides for PFAS." This study reported the presence of PFOS in six of 10 pesticide products tested. EPA evaluated the 10 pesticide products included in this study using two different test methods to detect PFAS. The first method was developed by the Agency to specifically measure PFAS in pesticide samples containing surfactants and non-volatile oils, and the second method was used in the study published in the Journal of Hazardous Materials.

EPA obtained samples of the specific pesticide products from the study author and purchased additional products with the same EPA registration numbers on the open market to conduct analyses. EPA tested all samples using both methods and did not detect the presence of PFOS, nor any of 28 additional PFAS it screened for, above the lowest level that our lab instruments can detect (0.2 parts per billion) in any of the pesticide products using either method of detection. The equipment and methodology used by EPA would have shown PFAS detections if present in those pesticide products given that their level of detection (LOD) is 2,500 times more sensitive than the LOD reported by the equipment used by the study author.

EPA requested additional information, including raw data from the study author, but did not receive any beyond the published results. EPA's study report contains additional scientific details regarding how the two methods differ and the significance of using the Agency's new method when testing these specific formulations.

One of the most important differences between the two methods is that EPA's method ensures accurate measuring of PFAS by eliminating interference from the oils and surfactants present in these formulations which can result in false positive detections.

EPA will continue to invest in scientific research to fill gaps in understanding of PFAS, to identify which PFAS may pose human health and ecological risks at which exposure levels and develop methods to better test and measure them.

A Future Without Glyphosate Report

A new study from Aimpoint Research finds that if glyphosate were no longer available, U.S. farmers would bear the burden of increased input and operating costs, with small farmers disproportionately affected. Further analysis reveals a cascading chain of likely higher-order effects and unintended consequences, the most impactful being the rapid release of additional greenhouse gases and the reversal of decades of conservation and sustainability gains. Key points from the report:

- Farmers' profits fall as labor costs rise and they turn to more expensive glyphosate alternatives.
- Use of alternatives would represent a 2-2.5X increase in cost/acre while switching to tillage could increase production costs by $1.9B+
- Small farmers are hit the hardest by decreased profits.
- Costs to consumers rise as food prices experience marginal, inflationary pressures.
- CO2 emissions and fuel use increases

A Future Without Glyphosate: https://report.aimpointresearch.com/

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National and Regional Weed Science Meetings

Jul. 24 - 27, 2023 Aquatic Plant Management Society (APMS), Indianapolis, IN www.apms.org
Dec. 11 - 14, 2023 North Central Weed Science Society (NCWSS), Minneapolis, MN www.ncwss.org
Jan. 8 - 11, 2024 Northeastern Weed Science Society (NEWSS), Gettysburg, PA www.newss.org
Jan. 22 - 25, 2024 Southern Weed Science Society (SWSS), San Antonio, TX www.swss.ws
Jan. 22 - 25, 2024 Weed Science Society of America (WSSA), San Antonio, TX www.wssa.net
Feb. 26–Mar. 3, 2024, 25th National Invasive Species Awareness Week, Washington DC www.nisaw.org
Mar 4 - 7, 2024 Western Society of Weed Science (WSWS), Denver, CO www.wsweedscience.org