

SCIENCE POLICY REPORT

WSWS Board Meeting

October 19, 2021

Lee Van Wychen

2021 Science Policy Fellows: Rebecca Champagne and Devon Carroll

This year's Science Policy Fellows are Rebecca Champagne at the University of Maine and Devon Carroll at the University of Tennessee. They are working on the weed science research priorities survey and analyzing the 2021 survey results for the most common and troublesome weeds in aquatic and no-crop areas, among many other projects and meetings. They have received the first of their two stipends of \$2,500. The second and final stipend will be for travel to the WSSA annual meeting in Vancouver.

FY 2022 Ag Appropriations Moving Forward, but Short-Term Continuing Resolution to Dec. 3

The House has moved forward with their \$26.5 billion spending plan for the FY 2022 Agriculture budget that would provide about a 10% increase over current funding levels, including \$3.391 billion (\$321 million above the FY 2021 enacted level) for agriculture research programs. The House ag appropriations bill passed out of committee on a bipartisan vote. It is now part of a more controversial [Seven-Bill Appropriations Package](#) in the House that was approved on a party line vote on July 29.

The Senate ag appropriations bill cleared the Appropriations Committee on a 25-5 vote on August 4, has not passed the full Senate. The bill includes about \$25.9 billion and would boost spending on ag research by \$292 million over the current fiscal year to \$3.6 billion, roughly the same increase included in the bill that cleared the House.

Many ag research programs are slated for increases in both the House and Senate versions compared to FY 2021 levels. This includes an approximate \$150 million increase for ARS and \$100 million increase for NIFA. Specifically, the IR-4 Program, which has been flat funded at \$11.9 million per year for the past decade was recommended at \$20 million in the president's FY 2022 budget, but only \$14 million in the House and \$14.5 million in the Senate. Other NIFA programs that were slated to receive increases in both the House and Senate include the Hatch and Smith-Lever Act capacity funding programs, AFRI Competitive Grants, and SARE.

However, there is still no agreement yet on overall spending levels in the Senate for the next fiscal year, which started October 1. Congress passed a continuing resolution on Oct. 12 that funds the government at FY 2021 levels until Dec. 3, 2021, while also increasing the federal debt limit.

"Infrastructure Package" Could Provide Nearly \$500 Million for Invasive Plant Management

An "Infrastructure Package" has been under consideration many times in the past decade, but has never made it across the finish line. However, Congress has gotten further down the road to final passage in the past couple months than in recent memory.

However, there is a complicated political "do-si-do" going on (some might call it a "game of political chicken") where the fate of the current \$1.2 trillion infrastructure package that passed the Senate on a 69-30 vote in early August is inextricably tied to the more monstrous "budget reconciliation" bill that currently has a \$3.5 trillion price tag.

All that aside, the current version of the infrastructure bill will cost \$1.2 trillion over eight years, and has more than \$550 billion in new spending, including:

- \$110 billion in new funds for roads, bridges, and major projects (\$40 billion is new funding for bridge repair, replacement, and rehabilitation, and \$17.5 billion is for major projects)

- \$73 billion for the country's electric grid and power structures
- \$66 billion for rail services
- \$65 billion for broadband
- \$55 billion for water infrastructure
- **\$21 billion in environmental remediation**

Part of the “environmental remediation” spending in the infrastructure package includes the following two programs that could channel almost a \$500 million over five years for invasive plant management:

- Sec. 11522. **\$50 million per year for five years for an “invasive plant elimination program”** through the Federal Highway Administration.
- Sec. 40804. **\$200 million** split between the Dept. of the Interior and USDA over 5 years for “ecosystem restoration” through **the US Forest Service for “invasive species detection, prevention, and eradication, including conducting research and providing resources to facilitate detection of invasive species at points of entry and awarding grants for eradication of invasive species on non-Federal land and on Federal land”**.

“Budget Reconciliation” Bill is Massive, Mind-boggling, and a Game Changer

On Sep. 13, the House Agriculture Committee advanced its portion of the \$3.5 trillion reconciliation package by a party line vote of 27-24. The bill includes a massive \$7.75 billion investment in agriculture climate research and infrastructure. Below are some of the funding INCREASES that are in the current draft of the bill, relative to its FY 2021 funding level:

Agriculture Research Item	FY 2021 Funding Level	“Reconciliation Bill INCREASE”
Agricultural Research Infrastructure	\$0	\$3.65 billion
Agriculture and Food Research Initiative (AFRI)	\$435 million	\$500 million
Agriculture Advanced Research & Development Authority (AgARDA)	\$0	\$380 million
Foundation for Food and Agriculture Research (FFAR)	\$185 million	\$540 million
Smith-Lever Cooperative Extension	\$315 million	\$600 million
Sustainable Agriculture Research Education (SARE)	\$40 million	\$500 million
Research Equipment Grants	\$5 million	\$100 million
Crop Protection & Pest Mang’t	\$20 million	\$30 million
Organic Agriculture Research and Education Initiative	\$25 million	\$200 million
Agricultural Research Service	\$1.49 billion	\$250 million

Some of the “Budget Reconciliation” bill increases occur in a single year, while other increases would occur over five years with the total increase reached by FY 2026. Either way, you can do the math and see why some of these numbers are both mind-boggling and a game changer.

The path forward for the “budget reconciliation” bill remains unclear. Senators Manchin (D-WV) and Sinema (D-AZ) have requested a much smaller package of about \$1.5 trillion package (compared to the current \$3.5 trillion). The National and Regional Weed Science Societies are continuing to engage on both the budget reconciliation bill and the infrastructure bill to make sure weed science research and management issues are well represented.

As part of the AFRI Coalition, WSSA sent a letter to Congressional leadership in support of the \$7.75 billion for USDA research in the House Agriculture Committee reconciliation proposal. The letter highlighted the \$500 million in additional funding proposed for AFRI and emphasized the transformative impact that level of funding could have on American agriculture. [Read the letter here.](#)

Confirmed Federal Agency Leaders

- USDA Secretary – Tom Vilsack
- USDA Deputy Secretary – Jewel Bronaugh
- USDA Under Secretary for Research, Education and Economics (nominated) – Chavonda Jacobs-Young
- USDA Under Secretary for Natural Resources and Environment (nominated) – Homer L Wilkes
- DOI Secretary – Deb Haaland
- DOI Deputy Secretary- Tommy Beaudreau
- DOI Assistant Secretary for Fish, Wildlife and Parks- Shannon Estenoz
- DOI Assistant Secretary for Water and Science – Tanya Trujillo
- Army Corps Assistant Secretary of the Army for Civil Works (nominated) – Michael Connor
- EPA Administrator- Michael Regan
- EPA Deputy Administrator – Janet McCabe
- EPA Assistant Administrator for Chemical Safety & Pollution Prevention- Michal Freedhoff
- EPA Assistant Administrator for Water- Radhika Fox
- Council on Environmental Quality (CEQ) Chair- Brenda Mallory

Paraquat Decision Drops: EPA Finalizes Paraquat Registration, OKs Aerial Applications for Now

By Emily Unglesbee, DTN Staff Reporter. Published 8/2/2021. Republished with permission.

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2021/08/02/epa-finalizes-paraquat-registration>

EPA finalized its interim registration decision for paraquat on Aug. 1, reversing its proposal last year to ban most aerial applications.

Instead, the agency will permit aerial applications of the Group 22 herbicide in crops, with expanded buffer requirements and acreage limits designed to protect applicators. Aerial use of paraquat is most common in cotton, where it is used as a plant desiccant to prepare for harvest.

Though finalized, EPA's conclusion here remains an "interim" registration decision. The agency will not have a complete registration decision for paraquat until it conducts its endangered species assessment and an endocrine screening for the chemical.

The agency first put out a draft interim decision for paraquat back in October 2020, wherein it proposed banning all aerial applications except for cotton desiccation, in addition to banning handgun and backpack sprayer application methods. See more on that draft decision [HERE](#). In its new decision, the EPA noted that, outside cotton desiccation, "aerial application of paraquat is likely minimal or sporadic."

Some of the changes EPA made between that draft and the new finalized decision are the result of new data from a consortium of chemical companies called the Agricultural Handler Exposure Task Force. See more [HERE](#).

Ultimately, the finalized decision has these changes:

- Aerial applications are permitted but limited to a maximum of 350 acres per applicator within a 24-hour period for all uses except cotton desiccation, where no acreage limitations will be required.
- A 50- to 75-foot residential buffer requirement now applies to all aerial uses of paraquat.
- The use of human flaggers during paraquat applications is prohibited.
- Enclosed cabs are required for applications made to more than 80 acres in a 24-hour period, to limit inhalation risks.
- For smaller applications to 80 acres or fewer in a 24-hour-period, PF10 respirators can be used, or enclosed cabs.
- Applications with mechanically pressurized handguns and backpack sprayers are prohibited.
- Applicators must follow a 48-hour restricted entry interval for all crop uses except for cotton desiccation, which requires a seven-day restricted entry interval.
- Labels will include new language designed to limit spray drift, as well as new units of measurement.

To see the full decision, visit the EPA docket [HERE](#).

Use of paraquat, which is sold under brand names such as Gramaxone, Firestorm and Parazone, has increased steadily in the U.S. in the past decade, in response to the development of herbicide-resistant weeds. Applications rose from under 5 million pounds a year before 2013 to as high as 12 million pounds per year in 2017. Based on survey data from a research company called Kynetec USA, the highest use by acreage is in soybeans, cotton and corn, but producers also lean heavily on paraquat in grapes, pistachios and peanuts.

However, the chemical has also been the target of lawsuits and controversy, given its high toxicity, its role in poisoning accidents and research suggesting it might be linked to Parkinson's disease. Most recently, paraquat registrant Syngenta and a past manufacturer of the chemical, Chevron USA, are facing class-action lawsuits alleging that its use has caused Parkinson's disease in farmers. See more [HERE](#).

The herbicide is undergoing EPA's routine 15-year re-registration review, which the agency began back in 2012. In 2016, the agency instituted new rules on labeling, packaging and handling requirements aimed at reducing accidental poisonings. See more [HERE](#).

Environmental groups reacted with concern to EPA's finalized interim decision permitting aerial applications.

"It's extremely disappointing that the Biden EPA is reapproving this dangerous pesticide, which is outlawed across a lot of the world," Nathan Donley, environmental health science director at the Center for Biological Diversity, said in a news release. "Instead of banning a weed-killer linked to Parkinson's disease in farmworkers, reproductive harm in small mammals and increased death rates for birds, this administration is bowing to the wishes of the chemical industry and allowing it to be sprayed on crops from the air."

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Lee Van Wychen NOTE 1: The cancellation of backpack sprayers and mechanically pressurized handguns **does NOT have an impact on the experimental use of paraquat** under an Experimental Use Permit or the 40 CFR

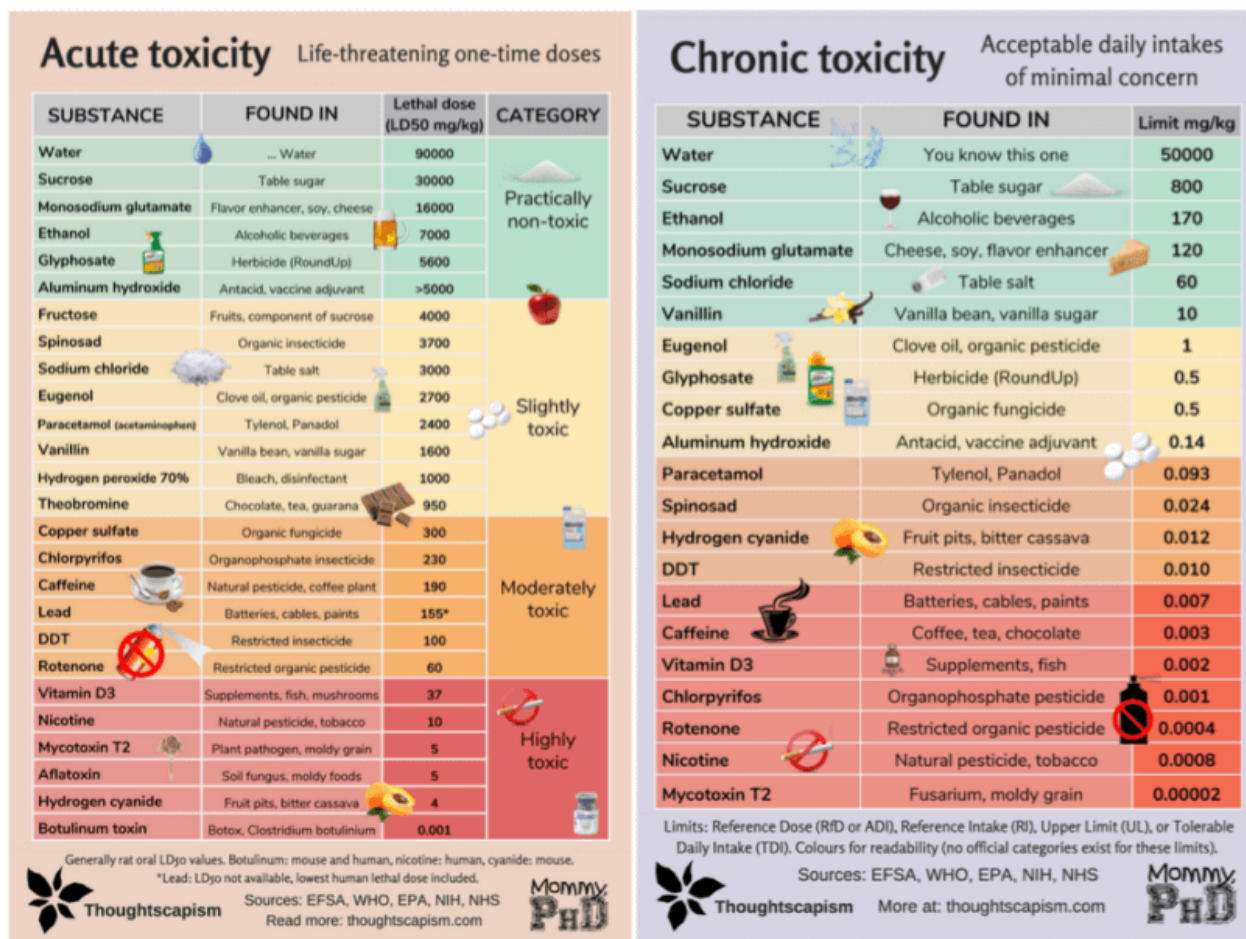
172.3(b) exemption. Labels for unregistered products distributed solely for experimental use and research purposes do not need EPA approval and can differ from registered products as appropriate for the experimental use.

Lee Van Wychen NOTE 2: After a thorough review of the best available science, **EPA has NOT found a clear link between paraquat exposure from labeled uses and adverse health outcomes such as Parkinson’s disease and cancer.** EPA has evaluated hundreds of studies, including published toxicity and epidemiology literature on paraquat exposure and adverse health outcomes, including Parkinson’s Disease. There are many studies on paraquat and Parkinson’s Disease that range in quality and provide conflicting results. Following EPA’s 2019 literature [review](#), a [2020 update](#) from the large and comprehensive Agricultural Health Study (AHS) was published that **reported NO association between paraquat exposure and Parkinson’s Disease.** The AHS is considered the “Gold Standard” and has been tracking the health of tens of thousands of agricultural workers, farmers and their families in Iowa and North Carolina. Notably, the updated AHS did not replicate [earlier 2011 findings from AHS](#) that were considered by EPA and suggested a potential association may exist.

Infographic: Does Glyphosate Cause Cancer? 18 of 19 Global Regulatory and Chemical Oversight Agencies Say ‘no’ While One Presents Equivocal Data

By: Genetic Literacy Project. September 13, 2021.

<https://geneticliteracyproject.org/2021/09/13/infographic-does-glyphosate-aka-roundup-cause-cause-cancer-18-of-19-global-regulatory-and-chemical-oversight-agencies-say-no-while-one-presents-equivocal-data/>



Weed Science Societies Support NEPA and Lacey Act Fixes for Invasive Species

The national and regional weed science societies supported letters that would improve invasive species management on two separate issues.

The [first letter](#) requests that the Council on Environmental Quality (CEQ) approve the Department of the Interior's request for a number of categorical exclusions under the National Environmental Policy Act (NEPA) for invasive species control. Without the ability to use categorical exclusions to promptly control invasive annual grasses after a fire on federal lands, those invasive grasses have spread rapidly while federal land managers have to go through the NEPA process, which has taken years in many cases, before those invasive grasses can be managed.

The [second letter](#) supports legislation, S. 626, in the Senate that would fix a flaw in the Lacey Act, which came about through a federal court case, where the court interpreted that the US Fish and Wildlife Service (FWS) could not regulate interstate commerce in injurious species, notwithstanding decades of generally accepted practice during which FWS had exercised that authority.

Improving Bureau of Land Management (BLM) Approval Times for Weed Control Treatments

The BLM's herbicide risk assessment process has historically proven to be overly time consuming and costly. It is imperative that the agency improves the Programmatic Environmental Impact Statement process under NEPA to ensure BLM field offices and representatives can actively engage in landscape scale management programs on BLM lands. I'm working on a letter to Secretary of the Interior Haaland and newly-confirmed BLM Director Stone-Manning asking for approval of indaziflam for use on cheatgrass on BLM lands. Indaziflam was first labeled by EPA in 2010-11, but because of NEPA and the Programmatic Environmental Impact Statement process, BLM managers cannot use indaziflam as a tool for an integrated weed management program for cheatgrass, which will subsequently reduce fire frequency and occurrence and improve sage grouse habitat.

NISAW 2022 is Feb. 28 – Mar. 4

The next National Invasive Species Awareness Week (NISAW) will be February 28 – March 4, 2022 and will return to a single weeklong event and "fly-in" to Washington DC. If you have topics or issues of concern, or would like to help plan next year's NISAW, please let me know.

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