



Arizona Agriculture

OFFICIAL PUBLICATION OF THE ARIZONA FARM BUREAU

October, 2025

Volume 78

No. 8

AN IN-DEPTH CONVERSATION ABOUT PFAS: LAURA CAMPBELL

By Julie Murphree, Arizona Farm Bureau Director of Strategic Communications



Senior Conservation and Regulatory Relations Specialist for Michigan Farm Bureau, Laura Campbell assists farmers, agencies, universities, and legislators with developing and improving environmental practices, industry relations, and understanding regulatory impacts important to agriculture.

When I heard she was being considered as a speaker on the PFAS topic for the Yuma County Farm Bureau Annual Meeting but schedule conflicts were keeping her from participating, I thought what better forum than featuring her expertise in Arizona Agriculture, our regular publication for all our farm and ranch members. Laura was gracious enough to accept my invitation to answer questions about this important issue.

Laura co-chairs the Michigan Agriculture Environmental Assurance Program (MAEAP) Advisory Council, the state's premier on-farm environmental stewardship program, and co-chairs Michigan's Water Use Advisory Council, which recommends research and improvements to the state's water withdrawal regulations. She earned a Bachelor of Science from Michigan State University in Environmental Policy specializing in Sustainable Agriculture, and a Master of Science from Johns Hopkins University in Environmental Science and Policy. Ultimately, in her role, she has done extensive research on the impact of PFAS in farm and ranch country.

Laura, her husband Ben, and their son live near East Lansing, Michigan.

Arizona Agriculture: What are the most significant health risks associated with per- and polyfluoroalkyl substances (PFAS) exposure, who is most at risk, and are the health risks claimed by experts regarding PFAS as critical as is currently presented?

Campbell: Depending on how you define a PFAS chemical, there are thousands of them, but we only have detailed health impact data about two of them, Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS). After PFAS exposure caused human and livestock health im-

pacts downstream from a DuPont manufacturing facility in Parkersburg, West Virginia in the 1980s, a federal health panel was organized to identify the diseases most attributable to PFAS. That panel named ulcerative colitis, pregnancy-induced hypertension, thyroid disease, testicular cancer, and kidney cancer as health consequences from PFOS and PFOA exposure. These findings were well supported because of the extremely high exposure caused by the discharge from that facility and the detailed medical research done in its aftermath.

Since that 2013 federal report, additional information has been published identifying links between PFAS exposure and decreased immune response to vaccines, liver disease, kidney disease, and decreased birth weight.

The big question, however, is how much exposure is too much, and how do we determine whether a disease came from PFAS exposure and what was caused by something else? Many studies linking PFAS to diseases are based on animal studies, and other species have very different responses to PFAS exposure. Many other studies had inconclusive results or did not link the amount of PFAS exposure to the level of disease development.

This leaves us with having to estimate the threshold of exposure that could cause health impacts, with the price of being wrong either seeing increases in disease from regulatory limits set too high, or the inability of many foods and farming, water, wastewater, and manufacturing industries to meet regulations being set too low and being driven out of business.

Arizona Agriculture: How do PFAS persist and spread in the environment, particularly in water systems, soil, and wildlife, and what are the primary sources of environmental contamination?

Campbell: The first thing to keep in mind is that PFAS chemicals are used in a LOT of materials and products. They get into the environment because they are so commonly produced. In the U.S., everything from electrical equipment to machinery fluids, firefighting foam to metal and chrome plating, paints, coatings, sealants, textile and leather, rubber, toiletries, drilling surfactants, and paper manufacturing all rely on PFAS chemicals and are reported to EPA. Worse, there are a lot of products that use PFAS chemicals that are not required to report their use, such as food and drugs, medical devices, many cosmetics, firearms and ammunition, so it's difficult to even quantify how many PFAS chemicals are manufactured or used each year.

All this PFAS use creates a very widespread wastestream that goes to landfills, wastewater facilities, or is discharged directly into the water, soil, or air.

SEE IN-DEPTH CONVERSATION ABOUT PFAS PAGE 5

ADVOCACY IN ACTION: A SUCCESS IN POLICY APPLICATION

By Daniel Harris, Arizona Farm Bureau Government Relations Manager

What began as a localized concern in Graham County about cotton seed performance has become a model for how Arizona agriculture advances policy: start local, build a coalition, and work the problem together.

In 2023, Graham County Farm Bureau members elevated a straightforward question through the Arizona Farm Bureau's policy development process: without a seed germination standard, common across much of the Cotton Belt, was Arizona at a competitive disadvantage? Their proposal wasn't a complaint; it was a call to action rooted in producer experience and a desire for a level playing field, if other states with minimum germination standards were receiving higher quality seed, leaving lesser tested quality seed for states like Arizona with no germination regulation. Could that be the reason growers in Graham County had been experiencing issues with their Cotton crops? Delegates at the Farm Bureau Annual Meeting agreed, adopting and expanding the policy to support germination standards for all agricultural seed.

From there, advocacy did what it does best, connect people and align incentives. Farm Bureau leaders engaged lawmakers to consider how state policy might help. Industry partners, seed companies, commodity groups, and university extension, joined the conversation in good faith. The Arizona Department of Agriculture (AZDA) opened the doors for stakeholders to talk through options. Each step reinforced a simple principle: when the goal is a stronger agricultural industry, everyone has a role.

THE ISSUE, AND WHY IT MATTERS

Growers were seeing uneven stands, thin rows, and costly replants in some areas. The working hypothesis was simple, seed that clears a warm germination test can still struggle when soils are cool, especially early in the planting window. Warm germination evaluates viability under ideal conditions; cool germination evaluates vigor under stress. If cool germ is low, seedlings may imbibe water quickly in cool soil, then stall or succumb to stress before roots and shoots extend, which leads to gaps in the row. With seed nearing five hundred dollars a bag and narrow planting windows, those gaps turn into replant bills, lost time, and lower yield potential.

THE SCIENCE

Warm germination tells you how many seeds are alive under favorable conditions; it is a ceiling on potential. Cool germination, sometimes called a vigor test, simulates early season stress, cooler soil temperatures, and slower growth, it is a reality check on field perfor-

SEE ADVOCACY IN ACTION PAGE 7



IN THIS ISSUE...

The Media - Page 2

- Get in Their Head

Maximize your Delegate Power - Page 4

- Your Delegate Vote Matters

Labor, Pests, and the Farm Economy - Page 8

- What's the Latest

NAIL MEDIA INTERACTIONS: MASTER THE REPORTER'S MINDSET

By Julie Murphree, Arizona Farm Bureau Director of Strategic Communications

Stepping into a volunteer leadership role for the Farm Bureau or any ag industry group demands a ton from you. That often includes facing off with the media. Even after training, it can feel daunting. But like any skill, there are insider hacks. The ultimate edge? Start thinking like the reporters themselves.

A while back, I chatted with Ilana Lowery, ex-editor-in-chief of the Phoenix Business Journal and current Arizona Director of Common Sense Media. Her top tip: Slip into the reporter's shoes. Grasping what fuels their drive gives you a keen advantage in collaborating effectively.

These five takeaways from our talk are my go-to toolkit when coaching the Center for Rural Leadership's Project CENTRL Effective Communications sessions. As an industry leader, they'll supercharge your media game too.



Each year, Project CENTRL's current class acquires media skills during a panel interview at AZTV in Prescott. This training prepares our rural leaders to get a taste of the media environment.

• **What's your deadline?** Gauge the timeline to see if you can even jump in.

• **Can you preview a couple questions?** Get a sense of their angle so you're prepped on what they want.

• **Tell me about your audience.** This sharpens your storytelling to resonate.

• **When's the story dropping?** Track it to catch the airdate or pub date.

These pre-interview probes have turbocharged my media dealings, making them way more impactful for me and the farmers and ranchers I link up with journalists.

IN THE NEW MEDIA ERA

Finally, remember we are in a "new media" era: Podcasts, independent journalists, substacks, (online platforms combining a website, blog, and newsletter service, allowing writers/creators to publish content and build paid subscription-based communities), and more. Your audiences might connect to you from an entirely different channel you never even imagined?

While old media struggles, new media is "hitting it out of the ballpark." Ask yourself, have you ever been solicited to come on a podcast show? Perhaps if you are ever asked, you need to say, "yes." Some of the same rules for preparing for old media apply to new media: deadlines, audience profile, types of questions.

You're the news now. Make it count. 📱

- Tackle the "Who Cares?" Challenge.** Reporters grill every pitch with this brutal question to themselves and why they ask the questions they ask: "Who cares?" Why bother covering your story? Whether crafting a pitch, press release, or talking points, nail this head-on. It's all about delivering value to their core audience, readers or viewers. Ask yourself: "How does my angle hit home for them?" Know their crowd, and you'll crush that "who cares" hurdle.
- Match the Medium's Vibe.** Not all stories fit every format. Killer visuals scream for TV, video, or print, kind of like a stadium demolition that's a feast for the eyes but flops on radio. Size up your assets and amp up how they boost your narrative.
- Humanize It:** Put Real Faces Front and Center. News thrives on people. Audiences crave gripping tales. Sure, a quote from a CEO or board bigwig works, but it's bland. Share your story, your own experience often delivers raw emotion and authenticity. It's the human hook that reels in viewers. Again, share your own raw experience tied to the topic; it's often the most riveting angle.
- Hunt for the Fresh Angle.** Sharp reporters demand: "What's new here? Anything we haven't covered?" Dig up fresh stats, updates, or twists. Pro tip: "News" literally spells out "new," make it count.
- Arm Them with the Perfect Gear.** Reporters crave tools that streamline their grind, just like you. For radio? Deliver solid sound bites or voices, not pointless photos. Tailor your offerings to make their job a breeze.

If you're constantly in the media spotlight due to your role or a stand-out story, fire off these key questions every time they call before diving into the interview. These are questions I always ask when I get a media call.

It's your future. Let's protect it.®

Together we'll create a plan to protect what matters most to you.

APACHE JUNCTION 155 N. Meridian Dr., Ste. 104 480.626.8045	GLOBE 138 S. Broad St. 928.425.3632	PHOENIX CON'T 34225 N. 27th Dr. #138 623.587.8489
BENSON 898 W. 4th St. 520.586.8500	GOODYEAR 15150 W. Park Place, Ste. 108 623.925.0190 623.587.8482 623.469.5002	5010 E. Warner Rd., Ste. 105 480.935.4240
BUCKEYE 7335 S. Miller Rd. 623.935.6209	KINGMAN 2510 Stockton Hill Rd., Ste. B 928.377.5000	PRESCOTT 3005 N. Hwy. #89 928.778.9350
BULLHEAD CITY 2071 Hwy. 95, Ste. A 928.763.8464 2636 SR-95 #7 928.846.3232	3518 N. Irving St., Ste. A 928.757.5555	621 E. Gurley St., Ste. C 602.612.7150
CASA GRANDE 408 N. Sacaton, Ste. E 520.836.2511	LAKE HAVASU CITY 1600 McCulloch Blvd. N., Ste. 5B 928.846.3232	PRESCOTT VALLEY 8008 Yavapai Rd., Ste. D 928.458.5880
CAVE CREEK 6554 E. Cave Creek Rd., Ste. 10 480.575.0710	MESA 1012 S. Stapley Dr. #114 480.649.0260	QUEEN CREEK 18933 E. San Tan Blvd. #107 480.987.9163 602.767.8540
6554 E. Cave Creek Rd., Ste. 6 623.587.8495	2509 S. Power Rd., Ste. 106 480.279.1874	SAFFORD 1805 W. Thatcher Blvd. 928.428.4618
CHANDLER 1820 E. Ray Rd., Ste. A205 480.284.4223	2812 N. Norwalk, Ste. 117 623.745.9929	SCOTTSDALE 7650 E. Redfield Rd., Ste. D-4 480.483.8787
3130 N. Arizona Ave., Ste. 114 480.428.7740 602.946.4779	1819 E. Southern Ave., Ste. E21 602.805.7820	9170 E. Bahia Dr., Ste. 103-E 623.587.8489
COTTONWOOD 1759 E. Villa Dr. #113 928.649.8686	MIAMI 520 W. Live Oak St. 928.473.1234	SHOWLOW 810 E. Deuce of Clubs 928.537.2990
DEWEY 13207 E. State Route 169 #C1 928.632.0014	ORO VALLEY 10355 N. La Canada Dr. #197 520.219.3600 520.885.3083	SPRINGERVILLE 299 S. Mountain Ave., Ste. B 928.333.0111
FLAGSTAFF 1750 Railroad Spring Blvd., Ste. 6 928.527.1343	PARKER 1308 S. California Ave. 928.669.2437	TEMPE 6101 S. Rural Rd. #120 480.967.7306
FORT MOHAVE 5617 Hwy. 95, Ste. 102 928.763.8464	PAYSON 512 S. Beeline Hwy. #4 928.474.1775	WICKENBURG 300 N. Tegner St. 928.684.6895
GILBERT 325 S. Higley Rd., Ste. 100 480.635.3860	405 W. Main St., Building B 928.238.7020	2000 W. Wickenburg Way, Ste. 300 623.587.8490
1015 N. McQueen Rd., Ste. 164 480.704.4182	PEORIA 9051 W. Kelton Ln., Ste. 6 623.979.3842	WILLCOX 365 N. Haskell Ave. 520.766.3276
GLENDALE 7025 W. Bell Rd., Ste C01 623.289.6430	PHOENIX 20860 N. Tatum Blvd., Ste. 300 #341 623.587.8496	WILLIAMS 128 W. Grant, Ste. A 928.635.2181
		YUMA 7175 E. 31st Pl., Ste. B 928.248.5038



Auto | Home | Life | Annuities | Business | Farm & Ranch | Crop | fbfs.com

Farm Bureau Property & Casualty Insurance Company,* Western Agricultural Insurance Company,* Farm Bureau Life Insurance Company*/West Des Moines, IA. Individual must be licensed with issuing company to offer insurance products. *Company providers of Farm Bureau Financial Services. M276 (7-25)

Social Media

Facebook
 @Fill Your Plate @Arizona Farm Bureau
 @AZFB AITC @UofAYoungFarmersRanchers
 @Arizona YF&R @AZFBMemberPerks
 @AZFB Women's Leadership Committee

YouTube
 @AZFB
 @AITC

Pinterest
 @AZAGintheClass
 @Fillyourplate

Instagram
 @azfb_aitc
 @azfbufr
 @azfarmbureau

X
 @AZFB
 @FillYourPlate
 @ArizonaYFR
 @AZFB_AITC

Arizona Farm Bureau Federation

The Voice of Arizona Agriculture www.azfb.org

OFFICERS

President | John Boelts | Yuma
1st Vice President | Richie Kennedy | Casa Grande
2nd V.P. | Sharla Mortimer | Dewey-Humbolt
Executive Secretary | Philip Bashaw

EXECUTIVE COMMITTEE

Stephen Klump | Willcox
Ben Menges | Safford

ARIZONA AGRICULTURE STAFF

Julie Murphree, Editor
Joel Carr, Advertising
Melissa Hogben, Design Layout

PLEASE SEND COMMENTS TO:

outreach@azfb.org
For advertising, e-mail ads@azfb.org,
call (480) 635-3609

ARIZONA AGRICULTURE is published 9 months, plus two special editions annually, (ISSN 0274-7014) by the Arizona Farm Bureau Federation. Periodicals postage paid in Higley, Arizona and additional mailing offices.

POSTMASTER

Send address changes to:
Arizona Agriculture
325 S. Higley Rd., Ste. 210
Gilbert, Arizona 85296
Subscriptions are included in annual dues.

ATTENTION

FARM BUREAU MEMBERS

RECEIVE AN ADDITIONAL

\$500 FORD REBATE

JUST FOR BEING A MEMBER

Valid with purchase of new vehicle. Excludes specialty vehicles and fleet deals. Restrictions on vehicle eligibility may apply. See sales representative for details.



SANDERSONFORD.COM | 623.842.8600

MAXIMIZE YOUR DELEGATE POWER AT THE ARIZONA FARM BUREAU CONVENTION

By Staff Reports

You've campaigned hard or been tapped by your County Farm Bureau president to serve as a delegate at the Arizona Farm Bureau Annual Convention this November 4-5. Whether you earned the spot through active involvement or were selected unexpectedly, this role hands you a prime chance to shape agriculture's hottest issues.

Plus, you'll enjoy networking with fellow farmers and ranchers across Arizona, gain fresh insights, and have a blast in the process.

To make the most of your delegate vote, connect with your County President or Policy Development Chair ahead of time. Dive into the policies your county is pushing for state-level consideration, along with key proposals from others. These are typically hashed out at October's county board meetings, mark your calendar and show up to stay in the loop.

If you've been knee-deep in your county's policy discussions, you're already ahead of the game. By the time November rolls around, you'll have a

solid, informed stance on these critical topics.

November 5 packs a full agenda: tackling resolutions and hearing from top-notch speakers. Every Farm Bureau policy begins at the grassroots county level, then gets debated, refined, and voted on by delegates like you.

In the resolutions session, team up with your county crew to fine-tune language that becomes official state policy and even advances to the American Farm Bureau if the policy has national implications. That might involve rallying support from other counties to back your views.

Don't forget to register now, book your hotel, and gear up for full engagement. You'll head back to your farm or ranch energized with new ideas, lasting connections, and robust policies. Best of all, you'll leave a real imprint on the agriculture industry you cherish and fight to strengthen nationwide.

REGISTER BY OCTOBER 14TH

5 WAYS TO REGISTER!

BY PHONE
Call Katie Booth at (480) 635-3605

BY FAX
Fax completed form to (480) 635-3781

BY E-MAIL
Scan document form to convention@azfb.org

BY MAIL
Include this form, send to:
Arizona Farm Bureau
325 S. Higley Rd., Ste 210
Gilbert, AZ 85296-4770

ONLINE
Visit AZFB.ORG online

HOTEL RESERVATION INFORMATION

Sheraton Mesa Hotel at Wrigleyville West
860 North Riverview
Mesa, AZ 85201
before **OCTOBER 14, 2025**
Please call (480) 664-1221 and mention
Group code: F B 5 F B 5 H
our rate \$169/night, plus tax.



104th ANNUAL CONVENTION REGISTRATION FORM

November 4 - 5, 2025 • Sheraton Mesa Hotel at Wrigleyville

Bridging Technology and Tradition in Modern Agriculture

Registration Fee \$185 per person (pricing includes all meals)

Do Not Delay - Registration Deadline October 14th - Register Today!

Farm Bureau members throughout Arizona will set policy, hear informational and political speakers, attend awards and recognition events and the Ag Expo Trade Show. Don't miss out on the opportunity to network with other members!

Name _____ Membership # _____

Address _____

City, State and Zip Code _____

Phone # _____ E-Mail _____

Credit Card # _____

Exp Date _____ CVV _____ Signature _____

Attendee Name(s):

Changing Hands (FBFS) - Tuesday 4 - 5pm
Let us help you preserve your legacy for future generations.

PLEASE INDICATE WHICH MEALS YOU WILL BE ATTENDING!

Service to Ag Awards Dinner - Tuesday Evening #ppl _____

AgPac Breakfast - Wednesday AM #ppl _____

President's Luncheon - Wednesday Noon #ppl _____

Include your Arizona Farm Bureau Membership Fee:

Maricopa and Yuma County \$180.00 All other counties \$142.00

Registration Fee Per Person **\$185.00** x _____ = _____
#ppl

IN-DEPTH CONVERSATION ABOUT PFAS *continued from Page 1*

Worse, the carbon-fluorine bonds in PFAS chemicals are very hard to break so they last a long time in the environment, and their chemical makeup both binds to organic materials like soil and move easily through water. This makes them mobile and difficult to get rid of once you have them in the environment.

This can be kind of overwhelming, but in terms of a farm, the biggest likelihood of exposure is from irrigation or livestock watering from surface water or groundwater containing PFAS chemicals, land applying soil amendments like compost, paper pulp byproducts or biosolids that contain PFAS chemicals, runoff from nearby aqueous film-forming foam (AFFF) used in firefighting operations, and nearby legacy waste containing PFAS chemicals from manufacturing landfills and dump sites used before waste management was regulated.

Arizona Agriculture: What should farmers and ranchers be concerned about and do to protect their soils and operations?

Campbell: Farmers are in a tough spot when it comes to protecting their farms and operations from PFAS exposure because so many sources are out of their control. If you sample your irrigation or livestock watering supply and find PFAS in it, do you even have access to an uncontaminated source, or can you afford a filtration system to run large volumes of water through it? A farm cannot choose if they are near a military base, airport, fuel refinery, or other location where AFFF firefighting foam is necessary to fight tough fuel fires and save lives. Your state may not have a program that samples soil amendments like biosolids, compost, or paper byproducts for PFAS. And because there are no federal regulations in the U.S. for PFAS concentrations in food, soil, or non-drinking water, simply finding PFAS can open a farmer up to one of the tens of thousands of lawsuits that have been filed across the country over PFAS in a wide variety of products and manufacturing processes.

That may sound like a nightmare, but before panicking, farmers should be aware that the Food and Drug Administration has included PFAS chemicals in its Total Diet Study since 2019, and has found very few instances of PFAS in food products – and nearly all of those were found in canned, imported seafood in which it is unknown whether the PFAS detected came from the fish or the cans they were packed in. In most circumstances, while PFAS can be found at very low concentrations in many locations, not much of it makes it to our general food supply.

Knowing much of our national food supply is PFAS-free does not diminish the tragedy that has hit several farms across the country: a dairy farmer in New Mexico near an Air Force base whose herd had to be destroyed because PFAS from AFFF firefighting foam entered their water supply, or a beef farmer in Michigan whose cattle were seized after PFAS from chrome plating made it into the biosolids he used for years on his forage and grain fields, or more than 60 farmers in Maine whose operations were shut down due to PFAS in compost and paper byproduct soil amendments used on their dairy, fruit, and vegetable operations, as well as others. If you think your farm may be at risk and you want to sample water, soil, or crops, be sure to work with a certified lab using EPA-approved testing methods that can collect and process the sample correctly, so you receive accurate information from the sources you test.

More importantly, advocating for responsible and common sense regulation of PFAS can put farmers in a good position to be informed and prevent exposure to PFAS from sources they can't control: policies like replacing AFFF firefighting foam with a non-PFAS formula once it is tested for effectiveness; surface and groundwater limits for the PFAS chemicals most commonly associated with health impacts in order to set discharge limits for manufacturers; pre-treatment, sampling, and land application restrictions for biosolids; and ultimately, well-crafted limits on PFAS use in manufacturing, consumer products, and packaging that reduce PFAS use in manufacturing and consumer products but do not lay the blame or liability on the people who purchase or retail those products with no ability to control the PFAS concentration in them.

Arizona Agriculture: What are the most reliable methods for detecting and quantifying PFAS in environmental samples (e.g., water, soil, air) and human tissues, and what are the limitations of current analytical techniques?

Campbell: The “gold standard” for PFAS sampling comes from EPA or FDA-approved analytical methods, which have been developed for 25 kinds of PFAS in drinking water and 24 PFAS in non-drinking source water, 40 types of PFAS in wastewater, biosolids, landfill leachate, soil, and fish, 50 types of PFAS in air samples and 30 PFAS in food. More review and analysis is underway to approve sampling methods for crops and livestock to help researchers detect PFAS exposure as well as track PFAS reduction as treatment is applied.

Farmers and residents should approach “home PFAS testing kits” with caution. Many companies offer tests for drinking water and other media, but the buyer should ensure that not only does the sampling meet federal analytical methods to ensure accuracy, but also that procedures for collecting samples are very precise. Because PFAS chemicals are so widely used in industrial and consumer products, it is very “easy” to contaminate your own sample if you do not use approved methods for collecting your samples. **[Editor’s note:** Arizona producers can get valid, quantifiable results rapidly due to the PFAS testing capacity through the Yuma Center of Excellence for Desert Agriculture (YCEDA) with a quick turnaround, in most cases less than a day.]

Many misconceptions and public fears of PFAS concentrations have been driven by samples collected by untrained people or not using approved methods, so farmers want to ensure that if they are going to go to the expense of PFAS testing, that the answers they get are valid. State environmental agencies can help identify certified labs and testing products to avoid those problems.

Arizona Agriculture: What are the challenges in remediating PFAS-contaminated sites, and which technologies or methods (e.g., activated carbon, ion exchange, or advanced oxidation) are most effective for different contamination scenarios?

Campbell: Technology has advanced a lot further for removing PFAS from drinking water than from other media like soil. Since the most likely long-term exposure to PFAS to an average person is likely to be their daily

drinking water source, this makes sense, but it can be frustrating for farmers looking for solutions to remediate soil and remove PFAS from livestock once exposed. That said, research is moving fast to understand methods to remove PFAS chemicals from soils, animals, and other media, because the scientific community understands the urgent need for farmers and residents concerned about exposure. An additional challenge to PFAS removal is destruction: the stability and strength of their molecular bonds are difficult to effectively destroy, and over time chemicals similar in molecular structure can “transform” into PFAS chemicals, making their control in the environment more complex. Destruction technologies such as advanced oxidation injecting hydrogen-oxygen radicals, supercritical water oxidation using heat and pressure, and sonolysis using ultrasonic waves to break down PFAS molecules in water and wastewater lack sufficient data to demonstrate their effectiveness in real-world scenarios, but many companies are working to bring them to market.

Technologies are far more advanced for filtration and removal that can be applied to different media:

DRINKING/SOURCE WATER:

- Granular Activated Carbon (GAC) filters
- Reverse osmosis filters that force water across a filter membrane
- High pressure nanofiltration membrane filters
- Colloidal activated carbon injected into pre-treated water to absorb PFAS
- Zeolites, clay minerals pumped into untreated water to adsorb PFAS

WASTEWATER:

- Pre-treatment of industrial effluent “before” it reaches the treatment facility using GAC or reverse osmosis
- Ion exchange resin adsorbent filters
- Foam fractionation forcing air bubbles through a water column to strip PFAS
- Coagulation or flocculation using alum or iron-based coagulants to solidify around PFAS making them easier to remove

BIOSOLIDS:

- Pyrolysis using heat without oxygen to break PFAS bonds
- High temperature incineration
- Land-applied activated carbon or biochar to stabilize and “lock in” PFAS in biosolids or soils

Arizona Agriculture: How are governments and regulatory bodies addressing the challenge of regulating thousands of PFAS compounds, including legacy PFAS and their replacements, and what current regulations exist?

Campbell: The U.S. Environmental Protection Agency is leading an across-government strategy on PFAS chemical reduction, starting with regulations on drinking water for the two chemicals we have the most health impact data about: PFOS and PFOA. More regulations on PFAS chemicals in drinking water will likely follow (especially since a 2024 drinking water regulation for PFAS chemicals included 5 chemicals: PFOS, PFOA, PFHxS, PFNA, and HFPO-DA, which was replaced in 2025 by regulation on just PFOS and PFOA), but there is less data on health impacts from other chemicals so EPA must take more time to review the science behind where to set regulatory limits on these and other PFAS chemicals. PFAS chemicals are very different, both in their chemical makeup and in their potential impacts to human health, so while it is frustratingly slow to implement regulations on small groups of PFAS at a time, it’s also necessary to ensure federal regulation meets the scientific reality of chemical exposure.

In other actions, EPA designated PFOS and PFOA as “Hazardous” under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund. This is a double-edged sword: while it makes it easier for the federal government to pursue PFAS manufacturers who have discharged PFAS into the environment for cleanup. However, it also opens farmers, wastewater facilities, landfills, and other “passive receivers” of PFAS chemicals to legal liability under citizen lawsuits. And there have been tens of thousands of lawsuits filed in the U.S. against a huge range of companies and people for detection of PFAS in products or safety claims on products: AFFF foam manufacturers, Department of Defense bases, food retailers, cosmetic companies, clothing and leather manufacturers, cookware manufacturers, certifying organizations for paper and textile sustainability standards, and even landowners wrapped into cleanup requirements.

To add to the confusion, 18 states have implemented their own bans on PFAS chemicals in categories that include children’s products, cleaning products, AFFF foam, food packaging, personal care, plastics and textiles. In your state, Arizona has banned AFFF foam.

Recognizing the impact of land application of PFAS-impacted biosolids, Colorado, Connecticut, Maine, Maryland, Michigan, Minnesota, New Hampshire, New York and Wisconsin have also implemented regulations on certain PFAS in biosolids.

Arizona Agriculture: What role do industry stakeholders play in phasing out PFAS and what challenges do they face in reformulating products or supply chains to eliminate PFAS?

Campbell: There is a lot of development among private companies, researchers, universities, and partners to find replacements for PFAS in products we use every day. Soy-based firefighting foam to replace AFFF is going through its final phases of testing to be approved by the Department of Defense for use on fuel fires on military bases. Research is ongoing to turn graphene oxide into non-PFAS coatings for water- and oil-resistant paper food packaging. Silicones, polyurethanes, acrylates, fatty acid derivatives, and titanium dioxide are available to replace PFAS in water-proofing for textiles and leather, but each carries their own hazards and risks to human and environmental health, so research is ongoing to find less harmful alternatives. Hydrocarbons are being tested as alternatives for surfactants, coatings, and surfac-

ANDY GROSETA: A LEGACY OF RANCHING, LEADERSHIP, AND FAMILY

By Julie Murphree, Arizona Farm Bureau Director of Strategic Communications

Peter Andrew "Andy" Groseta, a third-generation Arizona rancher, respected agricultural leader, and devoted family man, recently passed away peacefully at his Cottonwood home. His legacy will continue.

"I've worked with many agricultural champions over the years, but this cattleman, Andy Groseta, stands out in my mind as one of the most passionate I ever had the privilege of working alongside," said southern Arizona rancher and former Arizona Farm Bureau President Stefanie Smallhouse. "He was one to 'show up' every single time."

Smallhouse added, "I will always respect him for the fact that he sincerely cared about the future success of Arizona's cattle industry, and he did the work. If you ranch in Arizona, if you ranch in the West, if you ranch in the U.S., then please say a prayer of gratitude for this humble man that showed up for us every time, even when he was fighting for his life, he was there, at the meeting no one else had time for."

Added Arizona Farm Bureau President John Boelts, "Mr. Groseta will be sorely missed as a trusted friend and fellow advocate who fought for the best of what agriculture is and can be. While those of us that worked with him to protect agriculture will miss him, I'm sure no one will miss him as much as his family. Our hearts and prayers are with them in their time of mourning."

"I have known Andy for nearly 20 years and have had the opportunity to see his tireless efforts to serve the agriculture industry firsthand," said Arizona Farm Bureau CEO Philip Bashaw. "Most recently I had the honor of working alongside him to advocate for the University of Arizona College of Agriculture, Life and Environmental Sciences (CALES) and I have never met anyone with more passion and determination to protect and improve the college. His efforts will benefit the college and the ag industry for generations to come."

HIS LEGACY

Born on September 27, 1950, to Peter and Katherine (Maglich) Groseta Jr. in Cottonwood, Arizona, Andy was deeply rooted in his Croatian heritage. He cherished childhood memories of family gatherings, stomping grapes for homemade wine, and rotating lamb on a spit with his grandparents, Peter and Antonia Groseta Sr., and George and Anna Maglich. Each night, he bid his children and grandchildren "Laku noć" (Croatian for "good night"), a testament to his cultural pride.

Andy described his grandparents and parents saying, "They were raised with a strong work ethic and that is the way they raised us." Both sets of grandparents came from Austria-Hungary through Ellis Island with only the clothes on their backs to chase the "American Dream," not speaking any English. They eventually ended up in Jerome working in the copper mines.

Andy's life was intertwined with the land and livestock of the Verde Valley. As a third-generation rancher, he took immense pride in continuing the family legacy on the Groseta Ranch, which was recognized by the Arizona Farm Bureau as a Century Ranch in 2023. This prestigious designa-

tion honors farms and ranches operated by the same family for 100 years or more, reflecting the Groseta family's enduring commitment to Arizona agriculture. The Dart W Ranch, in Yavapai County, belongs to the Groseta family and has been for over 100 years. The ranch celebrated its centennial anniversary in 2022 and held an event to honor its long history in the Verde Valley.

Andy's connection to the ranch began early, his third-grade teacher once sent him to retrieve his father's cows from the school lawn at Clemenceau Elementary. His favorite childhood horse, Biscuit, carried him through the Verde Valley's rugged terrain, fostering a lifelong love for ranching.

A 1968 graduate of Mingus Union High School in Jerome, Andy was profoundly influenced by his FFA (Future Farmers of America) experience and his agriculture teacher. He served as a State FFA Officer, a role that shaped his future in agricultural leadership. He earned a B.S. in Animal Science and Agricultural Education from the University of Arizona in 1972, followed by a Master's in Agricultural Education in 1978. Andy taught agriculture at Amphitheater High School in Tucson for eight years, a role he loved, before transitioning to ranch real estate in 1978. By 1980, he was managing ranches for Western Farm Management, and in 1983, he became a partner in Headquarters West, establishing himself as a premier ranch realtor in Arizona until his passing.

Andy's personal life was equally rich. In Tucson, he met Mary Beth Meyers, who had come from Montana for a warm winter. Their early dates included pulling a cow from a mud tank, a fitting start for a life built on shared hard work. They married on May 10, 1980, and raised three children—Paul, Katy, and Anna—before returning to the Cottonwood ranch in 1986. Together, they nurtured a family and a cattle operation, instilling values of faith, hard work, and optimism. Andy's "love language" was hard work, and he taught his children and eleven grandchildren—Jacob, Dylan, Grace, Peter, Brandy, HB, Katherine, Richard, Basilio, Andy, and Perry—that "anything worth doing is worth doing right the first time."

A passionate advocate for agriculture, Andy's leadership extended far beyond the ranch. He served as President of the National Cattlemen's Beef Association and the Arizona Cattle Growers' Association (ACGA), earning the ACGA Cattleman of the Year Award. His contributions to Arizona agriculture were recognized with an induction into the Arizona Farming & Ranching Hall of Fame and an Honorary Doctorate from the University of Arizona. Andy also served as Chair of the Catholic Community Foundation and on the Mingus Union High School Board, reflecting his commitment to community.

The Arizona Farm Bureau, a key supporter of the state's agricultural community, celebrated Andy's contributions, particularly through the Century Ranch program. Andy Groseta exemplified the resilience and dedication of Arizona's ranching families. His recognition as a Century Rancher was a testament to his family's legacy and his personal commitment to preserving our agricultural heritage. 🚜

We know ag financing like you know how to cater dinner for 500.

For over a century we've served customers who can do just about anything. You deserve a financial partner who works as hard as you do.

AgWestFC.com

 Equal Housing Lender

This institution is an equal opportunity provider and employer.

AgWest 
FARM CREDIT

IN-DEPTH CONVERSATION ABOUT PFAS *continued from Page 5*

es used in cleaning agents, anti-fogging products, electronics, cosmetics, cookware, lubricating oils, paint and surface coatings, and other products and have high potential for use.

Private industry is where a lot of PFAS elimination is likely to happen, as companies and manufacturers respond to the growing list of lawsuits, U.S. and international regulations, and cleanup requirements they must respond to. That doesn't mean this will happen quickly, especially since many new products need to be evaluated to determine if they cause health or environmental contamination challenges.

Additionally, there are many industries where PFAS chemicals are harder to replace, and both companies and regulatory agencies will need to consider carefully how to prioritize efforts and get the best "bang for the buck" to replace PFAS chemicals where possible while reviewing how and if to replace smaller uses of PFAS where it is more essential to industrial function. However, this is a growing field of study and more replacements for PFAS will become available as this research continues.

Arizona Agriculture: Having learned all this, what is your advice for farmers wanting to protect themselves and their farms from PFAS contamination?

Campbell: The best things farmers can do in this or any other situation with a lot of unknowns and high legal and financial stakes is to organize!

Your county and state Farm Bureau is where policy direction starts, and where resolutions are sent for consideration to the American Farm Bureau Federation (AFBF).

AFBF's current policy on PFAS opposes landowners being held liable for the cost of cleanups when the farmer has no control over the contamination, PFAS being used in food packaging, and releasing the Department of Defense from liability for PFAS contamination of nearby farms.

That same policy supports funding for research on health risks and strategies to reduce that risk, using the best available science to set feasible regulations, collaboration of universities, agencies, and the private sector to develop proactive solutions and technologies to reduce exposure and health risks from PFAS, and establishing indemnification programs to compensate and support farmers facing losses from PFAS detection and contamination.

Only by working together can we see these goals accomplished. Learning from each other, advocating for policy solutions that have worked in other places, and supporting new research will help farmers meet this and other challenges with emerging contaminants. We're all in this together and your Farm Bureau can help! If you're not involved in your Farm Bureau's activities but care about the issue of PFAS, now is a good time to reach out. 🚜

ADVOCACY IN ACTION *continued from Page 1*

mance. Vigor is influenced by several factors, seed maturity and handling, genetics, seed size, seed coat integrity, oil content and storage, and the environment at planting, soil temperature, moisture, residue, planting depth, and seed to soil contact. Arizona's climate adds a twist, daytime warmth can mask nighttime soil cool downs, so a seed that looks fine at noon may face stress at dawn. The takeaway is straightforward, both numbers matter, and they matter most when matched to local conditions.

HOW ARIZONA WILL FIX IT

First, test widely, then decide smartly. At the behest of the stakeholder group that Farm Bureau initiated, AZDA, along with the help of Jadee Rohner with the Arizona Cotton Growers and the manpower of the Arizona Cotton Research and Protection Council, they convened a statewide process to collect randomized seed samples and run both warm and cool germination at the State Agriculture Laboratory, using transparent protocols and documenting results lot by lot. University extension is correlating lab results with real field data, soil temperatures at planting, elevation, planting dates, and planter settings, so numbers on paper translate into decisions on the farm. Seed companies are participating by sharing their own vigor information and explaining test methods, which reduces confusion and builds trust. Together, the group is pursuing four practical fixes:

1. Better information at purchase, growers will see warm and cool germ information upon request, plus clear guidance on the planting conditions each lot is best suited for.
2. Arizona tuned metrics, establish Arizona specific benchmarks for cool germination that reflect the state's planting windows and soils, rather than importing thresholds from other regions.
3. Field ready recommendations, turn the science into checklists and tools, minimum soil temperature targets, depth and downforce guidance, residue management tips, and variety placement by elevation and planting date.
4. Continuous improvement, expand the number of lots tested, compare methods across labs to reduce variability, and study seed traits that affect vigor in Arizona, including oil content and seed size, so the supply chain can improve upstream.

A PROCESS THAT REFLECTS WELL ON EVERYONE

The result is a constructive, statewide process that reflects well on everyone involved. Producers demonstrated how local voices can shape statewide priorities. The Arizona Farm Bureau showed how a grassroots policy can be shepherded into a solution focused effort that strengthens, not strains, relationships. Lawmakers helped elevate the issue and keep momentum. AZDA served as a trusted convener, ensuring the conversation stayed inclusive, transparent, and productive. Industry partners leaned in, sharing expertise and collabora-



rating on practical ways to build confidence from bag to field. University extension translated shop floor questions into research and outreach that producers can use at planting time.

LEADERSHIP THAT KEPT THE TABLE TOGETHER

Graham County's leadership, and the steady hand of its Farm Bureau president, Ben Menges, deserves special mention. Although better known for cattle than cotton, Menges exemplified the best of Farm Bureau advocacy, listening to members, bringing the issue forward, and keeping everyone at the table until momentum builds. The path ultimately emphasized data collection, information sharing, and Arizona specific agronomy, an approach different from where it started, but fully aligned with the original goal of ensuring seed quality and

fair competition.

WHERE IT GOES FROM HERE

Today, the coalition continues its work with the same spirit that launched it, collaborative, transparent, and focused on practical outcomes. More conversations are happening across counties and companies. More information is reaching growers before critical planting decisions. More trust is being built across the supply chain, because everyone can see that the process is working, and that each partner's contribution matters. If a germination standard is ultimately proposed, it will be grounded in Arizona data and accompanied by the management tools growers need to make it work in the field.

THE TAKEAWAY

Advocacy is not just about passing bills; it is about solving problems. When producers raise a concern, when associations channel that concern through a disciplined policy process, when agencies and researchers add structure and science, and when industry partners engage constructively, Arizona's agricultural communities win. From a county resolution to a statewide collaboration, the cotton conversation shows how advocacy, done right, strengthens the legacy of Arizona agriculture. 🚜

Farm Bureau Members Receive a

\$500 Exclusive Cash Reward¹²

on an Eligible New¹ Ford Truck or Ford Blue AdvantageTM Certified Used² Vehicle.



The Farm Bureau Exclusive Cash Reward¹ is now compatible with AXZD-Plans.



Ford F-150[®]

Visit FordRecognizesU.com/FarmBureau today for complete offer details!

¹Available on the purchase or lease of an eligible new 2024/2025/2026 model year Ford Maverick[®], Ranger[®], F-150, Super Duty[®] or F-150 Lightning[®]. Not available on any other Ford or Lincoln vehicles, or F-150 Raptor[®], F-150 Raptor R[™], Ranger Raptor or F-650[®] and F-750[®] Super Duty. Vehicle eligibility may change at any time. Available to U.S. residents only. Place a new retail order or take new retail delivery from an authorized Ford Dealer's stock by 1/05/26. Limit of five purchases or leases per household during the program offer (PGM# 32524). Offer subject to dealer participation. May not be used/combined with most other Ford private offers. See an authorized Ford Dealer, or go to <http://www.fordrecognizesu.com>, for complete details and eligibility (PGM# 32524). Due to high demand and global supply chain constraints, some models, trims, and features may not be available or may be subject to change. Check with your local dealer for current information. Offer subject to confirmation of eligibility.

²Available on the purchase of an eligible 2020-2026MY Ford Blue Advantage Gold, EV (F-150 Lightning only), or Blue Certified, Ford Maverick, Ranger, F-150, Super Duty or F-150 Lightning with under 80,000 miles. Not available on any other Ford or Lincoln vehicles, or F-150 Raptor, F-150 Raptor R, Ranger Raptor or F-650 and F-750 Super Duty. Vehicle eligibility may change at any time. Available to U.S. residents only. This offer is not eligible for customers purchasing a vehicle in the state of Texas. Take delivery from an authorized Ford Dealer's stock by 1/5/2026. Limit of five purchases per household during the program offer (PGM# 32678). Offer subject to dealer participation. May not be used/combined with most other private Ford offers. See an authorized Ford Dealer, or go to <http://www.fordrecognizesu.com>, for complete details and eligibility (PGM# 32678). Due to high demand and global supply chain constraints, some models, trims, and features may not be available or may be subject to change. Check with your local Ford Dealer for current information. Offer subject to confirmation of eligibility.

KEY ISSUES IMPACTING ARIZONA AGRICULTURE: LABOR, PESTS THE FARM ECONOMY

By Chad Smith, Arizona Farm Bureau Director of Government Relations

Arizona's agriculture sector, a powerhouse industry contributing nearly \$31 billion annually to the state's economy and fueling national food supplies with winter vegetables, cotton, livestock and more, faces mounting pressures in 2025 from labor shortages, invasive pests, and economic volatility. In Arizona's vast farm fields, acute worker deficits can leave crops unharvested amid seasonal gaps exacerbated by outdated immigration policies, while a invasive insect, the screwworm, threatens our livestock. Additionally, the Mexican Wolf remains a significant issue for Arizona ranchers.

Compounding these woes, escalating input costs, fluctuating commodity prices, and other factors threaten farm incomes.

COURT VACATES 2023 H-2A AEWR DISAGGREGATE FINAL RULE

On August 25, the U.S. District Court for the Western District of Louisiana vacated the Department of Labor's (DOL) 2023 Adverse Effect Wage Rate (AEWR) Final Rule, siding with sugarcane growers in *Teche Vermilion Sugar Cane Growers Association Inc., et al. v. Lori Chavez-DeRemer, et al.*

In what we have often referred to as the disaggregated rule, the court found the rule's requirement to assign separate wage rates for specific job functions, even when workers performed those tasks only briefly, was "arbitrary and capricious" under the Administrative Procedure Act. American Farm Bureau Federation economists had warned the rule would drive double-digit increases in labor costs, especially for farms employing heavy truck drivers, shuttle operators, and front-line supervisors, while adding more inefficiencies to an already cumbersome process.

As a result of the court's decision, DOL announced that the process for setting AEWR rates would revert to immediately prior to the 2023 rule's effective date. Additional guidance will be issued through the Federal Register.

This ruling represents an important win for agriculture, securing one of Farm Bureau's top labor priorities by halting a rule that would have according to American Farm Bureau economists, would have significantly increased farm labor costs.

USDA DISCONTINUES FARM LABOR SURVEY

Separately, USDA recently announced it will discontinue the long-standing Farm Labor Survey (FLS), historically used to evaluate national farm wages. Stakeholders await clarification on how this change may affect wage-setting and data collection moving forward. The survey, conducted by USDA's National Agricultural Statistics Service, has been a critical source of data for policymakers, researchers, and farm groups in understanding labor costs and trends.

With the FLS no longer in place, questions remain about how farm wage information will be collected and used going forward. Arizona Farm Bureau is closely monitoring USDA's next steps, given the importance of accurate labor data in shaping agricultural labor policy and informing decisions across the industry.

MEXICAN WOLF

The Mexican wolf remains a significant issue for Arizona ranchers and rural communities. Arizona Farm Bureau continues to support solutions that balance species recovery with the protection of livestock and private property. We are backing H.R. 4522, legislation that would delist the Mexican wolf while removing Mexico's wolf population from U.S. recovery goals, ensuring management efforts remain practical and science based.

In addition, Arizona Farm Bureau proudly supported the "Wolves Among Us" campaign, which highlighted the real-world impacts of wolf interactions on ranch families. The campaign raised awareness among policymakers and the public, underscoring the importance of safeguarding rural livelihoods at the expense of wildlife conservation. Please visit www.wolvesamongus.org to see the great work that was put into this campaign.

USDA INVESTS IN SCREWWORM PREVENTION

The new world screwworm, a devastating livestock pest, remains a top concern for animal health and the agriculture industry. To strengthen prevention efforts, USDA recently announced funding for a new sterile fly production facility in Texas. The facility will play a critical role in maintaining the barrier program that protects U.S. livestock herds from re-infestation.

At the same time, the University of Arizona continues to provide valuable leadership by developing resources and outreach to help producers understand risks, implement biosecurity practices, and stay informed on the latest science. Their work ensures ranchers and farmers have the tools needed to protect animal health and minimize economic losses.

Arizona Farm Bureau is closely monitoring the threat of new world screwworm and pressing for the resources needed to keep this destructive pest out of the United States. Establishing a sterile fly facility in Southern Arizona is a priority, providing a frontline defense along the border. Without

proactive measures, an outbreak could have devastating consequences for Arizona livestock, rural communities, and the broader agriculture industry.

USDA'S SEPTEMBER 2025 FARM INCOME FORECAST: DISASTER AID FUELS SHARP REBOUND

In recent Market Intel American Farm Bureau reported that USDA's latest farm income forecast projects net farm income at \$179.8 billion in 2025, a \$52 billion (41%) jump from 2024, though slightly below February's projection. Much of the rebound is tied to a surge in government disaster aid, with direct payments expected to reach \$40.5 billion, up more than 300% from last year.

Livestock producers are forecast to see record-high cash receipts of \$298.6 billion, led by strong cattle, hog, poultry, and egg markets. In contrast, crop receipts are projected to fall to \$236.6 billion, the lowest since 2007, as lower prices and production weigh on corn, soybean, and wheat.

At the same time, production expenses will climb to \$467.5 billion and farm debt is projected to rise to nearly \$592 billion, with interest costs up 5%.

While the forecast signals near-term recovery, USDA cautions that the improvement relies heavily on temporary disaster assistance rather than sustained market strength, leaving farmers vulnerable to future price pressures, rising costs, and debt burdens.

With USDA projecting stronger farm income tied to temporary disaster assistance rather than lasting market improvements, the need for Congress to pass a Farm Bill is urgent. Farmers and ranchers are facing elevated production costs, volatile markets, and ongoing risks from weather and labor shortages, challenges that cannot be addressed through ad-hoc aid alone. A comprehensive Farm Bill provides the long-term certainty, risk management tools, and conservation investments necessary to stabilize the farm economy and ensure America's food security. 🌾



A REAL MVP

Excluding life insurance from your financial strategy is like leaving your most dynamic player on the bench. With the ability to help fund retirement, pay for college and even help cover expenses if you become chronically ill, life insurance is both strong and versatile.

Get life insurance in the game. Contact your Farm Bureau agent about how we can tackle your life insurance needs and make a game plan together.

**FARM BUREAU
FINANCIAL SERVICES**

Auto | Home | Life | Annuities | Business | Farm & Ranch | Crop | Financial Planning | fbfs.com

Securities & services offered through FBL Marketing Services, LLC, * 5400 University Ave., West Des Moines, IA 50266, 877/860-2904, Member SIPC. Advisory services offered through FBL Wealth Management, LLC. * Farm Bureau Property & Casualty Insurance Company, ** Western Agricultural Insurance Company, *** Farm Bureau Life Insurance Company **/West Des Moines, IA. *Affiliates. *Company providers of Farm Bureau Financial Services. L1216-ML(8-25)