

Farmers partner with activists to close the SGMA water gap

A collaborative mindset is taking hold in the San Joaquin Valley as the realities of drought, climate change and groundwater overdraft are steering once-combative parties in a new direction. The San Joaquin Valley Water Collaborative Action Program (CAP) is bringing farmers to the table alongside environmental groups, drinking water advocates and local municipalities to develop a comprehensive plan for the many challenges ahead.

“I am frankly astonished to see the progress that we are making,” said Tim Quinn, executive officer of the CAP, during a recent meeting of the agriculture committee for the Association of California Water Agencies. “The reason is that all the five interest groups have very different attitudes than in years gone by.”



The San Luis Reservoir supplies the San Joaquin Valley. (photo: DWR)

The groups, known as caucuses, are tackling five problems: resolving water supply and demand issues; providing safe drinking water to communities; restoring habitat; coordinating efforts valley-wide; and aligning local, state and federal governments on policies. The CAP is working on an initial report assessing the problems and outlining a solution set and will release it for public review next month.

“We want to close the gap on groundwater overdraft everywhere, no matter what,” said Quinn. “That’s a significant commitment by the ag industry.”

The best example of progress was the water supply workgroup, he said, which is chaired by the “odd bedfellows,” Friant Water Authority CEO Jason Phillips and Rodd Kelsey, a water policy researcher at The Nature Conservancy. Nearly a dozen conservation groups participate in the CAP, including Trout Unlimited, American Farmland Trust and Sustainable Conservation, which has led on-farm groundwater recharge projects with growers. The groups have collectively built a trust that did not exist just six months ago, said Quinn.

Kelsey shared with *Agri-Pulse* his excitement over progress his workgroup has made in identifying the problem of water supply reliability for all users. The caucuses have also been receptive to his research on repurposing fallowed farmland for conservation projects and other multibenefit endeavors.

“They see the need for some of the most unsustainable agricultural lands coming out of production being a part of the solution,” said Kelsey. “They're excited to figure out how to make that happen in a way that doesn't create more pain for the communities in the valley and actually adds value to the valley.”

Habitat for imperiled wildlife could improve air and water quality, while other solutions for the land, such as developing renewable energy projects, could bring jobs to the communities, he explained.

While similar initiatives to the CAP have brought together environmental groups and water users to collaborate on solutions, Kelsey said the CAP has been unique for also including cities and counties as well as representatives from disadvantaged communities.

Alexandra Biering, who manages government affairs and communications for the Friant Water Authority, emphasized the importance of that trust.

“If nothing else, having some of these entities and groups talk to each other and engage with each other on neutral ground—honestly and openly—is something that a lot of folks have been struggling with how to do for years,” said Biering.

She has noticed that it has inspired groundwater sustainability agencies in the valley to engage more with clean water advocates.

“They're actually working together in a more collaborative fashion than they had in the past, when it was more antagonistic,” she said. “Even outside of the CAP, there are ripple effects that are being felt in the valley.”

Quinn recognized that “some big arguments, some big decisions” have yet to be made, but said the groups are headed in the same direction.

“A year ago, with every environmentalist you talked to, it was all about demand reduction,” said Quinn. “With every agricultural person you talked to, it was all about supply augmentation.”

He called it “no great surprise” that environmentalists are now “aggressively helping to pursue increased supply,” primarily through flood-managed groundwater recharge, while farmers are talking about repurposing land for conservation. Maximizing water supplies is the first step to closing the gap, which means capturing as much as possible from flood flows out of local streams and rivers. The CAP is also looking further ahead to broader flood management and capturing excess flows in the Sacramento–San Joaquin Bay Delta when atmospheric rivers deluge the watershed.



Tim Quinn, CAP executive officer

“By the time we are done, we will have a plan that restores sustainable supplies for a bright, vibrant ag economy, where we can look ourselves in the mirror and say we did not sell the ag economy out,” he said. “We will have an environmental restoration program that is among the biggest in the nation. We will have safe drinking water for all valley residents within 10 to 15 years.”

He described the interests as about 80% of the way toward complete alignment and past the point of antagonism toward each other and an adversarial winner-take-all approach.

Kelsey cautioned that “the devil is really going to be in the details” for how the valley can maximize groundwater recharge to solve the overdraft problem. While the groups may not agree on each of those details, he emphasized that the CAP will be most useful in providing a broad voice to decision makers on how the state can move forward and invest in solutions.

“That's going to be a very powerful voice,” said Kelsey. “That's the real power.”

Department of Water Resources Director Karla Nemeth applauded the progress with the CAP, calling it timely, as California is likely headed into another dry year and the state is seeking to bolster collaborative efforts at the local level and steer away from conflict.

“This is going to take a lot of people really helping California to move forward, particularly when it comes to water for agriculture,” said Nemeth.

She acknowledged the state has also struggled with ownership over conservation efforts and needs a landscape-scale approach to environmental restoration to deal with water management and species challenges in California.

This requires a new way of thinking that is similar to the CAP, she explained. State and federal wildlife agencies “are fundamentally regulatory agencies” and the trade-offs involved “aren’t necessarily in the DNA” of those agencies.

“That [approach] is also essential for us to do the work that we need to do relative to infrastructure investment,” she added.

Ag leaders call for slowing urban growth along Colorado River

Time is running short as parties dependent on Colorado River water negotiate over the future of water diversions with a deepening megadrought. During a House Natural Resources subcommittee hearing last week, lawmakers praised the work of Southern California cities in shoring up local water supplies. Farm leaders said other urban districts should follow their lead rather than buying up more agricultural water.

“What we have is a water imbalance, a math problem,” said Anne Castle, a senior fellow on natural resources, energy and the environment at the University of Colorado. “We need a plan that shares the burden of these reduced supplies but does it in a way that promotes equity among the states, between the upper basin and the lower basin, among the various sectors of the economy, including the agriculture sector.”

Castle emphasized the “need for speed,” owing to the water levels at Lake Powell dropping more than 50 feet last year—a loss of more than four million acre-feet of water. Another year like that would drop the levels below the hydropower turbines in Glen Canyon Dam, well before a new long-term drought plan would take effect in 2026.

“It's just not clear that the river will allow the current pace of discussions to continue without devastating consequences,” she said.

Challenging hydrology and federal directives have spurred agreements in the past, but so far, the Interior Department has not set any deadlines or established a default drought plan if the collaborative agreement effort falls through, explained Castle.

The consequences of a difficult hydrology have already hit Arizona farmers.

Tom Davis, president of the Agribusiness & Water Council of Arizona, explained how a shortage declaration for Lake Mead will lead to an 18% reduction in annual diversions for the state and impact farmers. Some irrigation districts will see a 70% cut to water supplies in 2022 and a complete shutoff the following year. This will lead to significant fallowing and reduced power generation, translating to double-digit increases in electric rates and brownouts during heavy use, he said.

Davis and his colleagues are working with agricultural water users throughout the upper and lower Colorado River basins on a policy paper recommending a set of outcomes to achieve with the river compact. River diversions support a \$3.4 billion agricultural economy in Arizona, which includes 97% of the nation's leafy green vegetable production in winter months.

He said farmers have increasingly improved their water use efficiency and the rate of water diverted to farms has decreased 15% since 1990 and nearly 18% since 1975.

“We farmers and ranchers would love to invest big piles of money in much more refined conservation application techniques,” said Oregon Republican Rep. Cliff Bentz. “But without the certainty of having the water, why would we ever do it?”

Pat O'Toole, who serves on the board of the Family Farm Alliance, which represents members in 17 Western states, agreed, adding that farmers need certainty.

“The inability to have sufficient predictability is death,” said O'Toole. “I wish bankers cared about climate and conservation. But they care about getting paid back, and they get paid back because a farmer has the predictability of the water supply.”

Bentz referenced the infamous farmland buyouts a century ago that propelled the growth of Los Angeles, and he worried the same could happen for the Colorado River. O'Toole noted how he has seen developers purchase water rights in the upper headwaters of the river, where he manages a family ranch. O'Toole described how Pat Mulroy, the former head of the Southern Nevada Water Authority who fought hard to maintain a water supply for Las Vegas, recognized that city, along with LA, Denver and Phoenix, are no longer sustainable.



Glen Canyon Dam saddles Lake Powell in Arizona. (Photo: [Adam Kliczek](#), Wikipedia Commons)



Pat O'Toole, Family Farm Alliance

“What that means is the only water for growth that's left is ag,” said O'Toole. “We're the reservoir for growth.”

Davis added that he has seen hedge fund managers purchase agricultural water along the river to transfer to rapidly growing cities.

“Even if all the agricultural water is moved to cities, eventually that growth will outstrip the water,” he said. “If there's a silver lining to this drought, it's requiring us all—ag and city users—to take a look at how we use our water and become much more efficient.”

Davis said the state has been looking into alternatives to surface water, ranging from reclaiming and cleaning contaminated groundwater supplies to importing desalinated water from the Sea of Cortez.

“Although that takes time and planning, and this drought bites a little harder every year,” he said. “So immediate results are needed.”

Taylor Hawes, Colorado River Program Director, The Nature Conservancy, noted that farmers and ranchers often lack the resources to try new conservation measures and that “locally adaptive solutions” are needed because agriculture is not uniform across the Basin. He called on the federal government to offer new ways of reducing water use while supporting agricultural production and the long-term viability of the West’s agricultural economy.

Earlier this summer, TNC and six other environmental groups issued a report on ten strategies to bolster climate resilience and mitigate the impact of climate change in the Colorado River Basin. For example, building water retention projects can mimic beaver dam activity in streams: retaining sediment, reconnecting streams with floodplains, elevating groundwater levels, and increasing habitat for wildlife.

On the urban conservation side, the Metropolitan Water District of Southern California has partnered with the Southern Nevada Water Authority to develop the nation’s largest recycled water project, adding 150 million gallons per day of new local water supply, according to the district’s general manager, Adel Hagekhalil.

“That's a big deal,” said the House Natural Resources subcommittee’s chair, Jared Huffman of California. “That is a lot more water than some of the large new surface storage projects that we sometimes fight about in this committee.”

Advocates for indigenous farmworkers push for better conditions, more enforcement of regulations

An often-overlooked segment of the farmworker population in California is gaining increased recognition as community-based organizations have collected and are now sharing their specific stories of working through the pandemic. “Indigenous farmworkers” is a broad term that includes people from Mexico and Central America who come from small, tight-knit communities where Spanish is not spoken or is a second language. The results are published in the report “Experts in

Their Fields: Contributions and Realities of Indigenous Campesinos in California During COVID-19.

At a virtual press event announcing the report's release, Dvera Saxton of the California Institute for Rural Studies, said "it's not always easy to connect with communities who have this well-earned distrust of outsiders," as is often the case with indigenous farmworkers. A 2020 study found about 25% of farmworkers identified as indigenous but Saxton said that's likely an undercount. She added these workers need to be seen, recognized and treated with respect.

"Indigenous farmworkers are human beings," she said. "They have expertise and skills that many of us don't possess and they've kept us fed and healthy during the pandemic."



Detail of the cover image for the "Experts in Their Fields" report. (Photo: Hector Amezcua, CAES, UC Davis)

These workers have arrived in California in different waves of immigration, said Sarait Martinez, executive director of the Binational Center for the Development of Indigenous Oaxacan Communities, which is one of the groups that sent bilingual (or polyglot) interviewers to gather information from indigenous farmworkers in the San Joaquin Valley and along the Central and South Coast regions. She says their stories illustrate not only the severity of the impacts of the pandemic on these essential workers, but how marginalized they were before the coronavirus arrived.

Many indigenous workers have been in this country for decades, Martinez said, emphasizing that workers' immigration status cannot be identified by the languages they speak. She also said access to adequate housing, healthcare and childcare already were precarious for many of these agricultural workers before spring 2020.

"The COVID-19 pandemic just exacerbated those inequalities and worsened the realities for our communities," Martinez said.

For example, all agricultural workers were deemed essential and were expected to continue working but when schools and childcare centers shut down, many families had to sacrifice one parent's income so someone was home with the kids. Some of the workers interviewed said with only half the income they had to choose between rent, utilities and food. Others lost their homes and had to move in with relatives even as the public health messaging advocated for more social distancing.

Martinez said the interventions implemented during the pandemic such as workplace safety measures, paid sick leave and protection from eviction were not always adequately translated for Indigenous communities and even sometimes when they were, they were not practical. For example, carpools presented a transmission risk but one worker said it was either ride together or stay home and lose income. Another worker said she tried to apply for rental assistance, but she struggled to gather appropriate documents and then those were rejected.

The larger concern, Martinez said, is that pandemic measures suffered from the same problems that plagued farmworker policies that came before: the rules on the books were not adequately enforced.

“We’re not saying all employers are bad,” she said, “but there’s definitely not enforcement across the board.” That’s why one of the report’s 10 policy recommendations is to create a new health and safety agency dedicated to agricultural workers.

“We need something different that is more worker-centered,” she said. It should recognize the needs of specific farmworker communities and also pay “a lot more attention to enforcement.”

Among the other recommendations are to ensure dignified salaries, provide government-funded safety net and disaster resources, ensure safe, affordable housing and provide language justice including more speakers of Indigenous languages in schools that enroll children of these farmworkers.

Some of the workers interviewed in the report said because they didn’t understand the technology their young children were expected to use for online schooling, the students missed out on lessons.

“I am sure that our indigenous youth were disproportionately impacted,” Martinez said. She’s hoping distribution of the report will generate more awareness of the layers of hardship experienced by agricultural workers from Indigenous communities. Ultimately, the intent of the project is to “really work to build an economy that works for everyone,” she said.

Additional research partners include [Vista Community Clinic](#) and the [FarmWorker CARE Coalition](#) with support from the [COVID-19 Farmworker Study Collective](#), a project that also has teams in Oregon and Washington.

Spending deal key for Biden as ag plays bigger role in climate summit

Agriculture will play more than a bit part in the global debate about climate change as an international conference kicks off Sunday in Scotland with a goal of getting the world on the path to net-zero greenhouse gas emissions by 2050.

A big question for President Joe Biden as he heads to the COP26 conference is whether he will have a deal with lawmakers to provide the funding, including for agriculture, that will be needed to implement the new U.S. commitment to slash emissions in half by 2030.

Agriculture’s role in addressing climate change gets its own special focus at the upcoming COP26 conference; Nov. 5-6 are set aside for events around “nature and land-use.” And agriculture also is taking a significant role in the increased commitments the United States and some other countries are making to help meet the global goal.

Biden in April said agriculture would be a key part of meeting the U.S. goal, but the administration has never detailed how much of the reduction farmers would account for. What the administration has made clear is that new funding for climate-smart agriculture would be needed to help reduce emissions.



President Joe Biden

To that end, Democrats on the House and Senate Agriculture committees developed provisions worth more than \$90 billion, including \$28 billion in conservation funding, to be part of Biden's Build Back Better bill, a package of climate-related measures and social spending priorities.

When the bill's final climate provisions are released, they will include estimates of how much they will reduce U.S. greenhouse gas emissions, according to a congressional source.

"You don't put billions of dollars into something unless you are counting on it getting you a lot of emission reductions," said Debbie Reed, executive director of the Ecosystem Services Market Consortium, a group working to develop ag carbon markets.

A senior Agriculture Department official speaking on condition of anonymity told *Agri-Pulse* "there's no question that bill is important" to Biden's defense in Glasgow of the U.S. climate pledge. "There are a bunch of big, important investments."

The White House and Democratic leaders have been pushing to get an agreement on the bill and its climate provisions before a G20 summit this weekend in Rome and additional meetings on Monday and Tuesday at the outset of the Glasgow summit.

"Next week is a critical week for President Biden, and for our leadership on the world stage as a country," Sen. Chris Coons, D-Del., said on Monday. "To have him go to the COP26 having to say, 'Well we're still working out the details,' and then work out the details a week later, would be an enormous missed opportunity."

But National Security Adviser Jake Sullivan on Tuesday said world leaders would understand if the deal isn't finalized before he meets with them. "I think you've got a sophisticated set of world leaders who understand politics in their own country, and understand American democracy, and recognize that working through a complex, far-reaching negotiation on some of the largest investments in modern memory in the United States ... takes time," he said.

There has been little controversy around the shape of the agriculture provisions, but they could be trimmed somewhat in the final version of the legislation.

"It's really important to be elevating agriculture's role" when it comes to reducing greenhouse gas emissions, said Marcia DeLonge, a senior scientist in the food and environment program at the Union of Concerned Scientists, a major environmental group. "Agriculture itself is a significant contributor to climate change, both directly from U.S. emissions, but globally."



Debbie Reed, ESMC

Agriculture Secretary Tom Vilsack will be in Glasgow Nov. 4-6, accompanied by a small cadre of USDA staff, to showcase his department's efforts to address climate change.

"Now is the time for global action to address climate change," Vilsack said in a statement announcing his plans to go to Scotland. "Together we can continue to lead the way with investments in science, research and climate-smart solutions that improve the profitability and resilience of producers, and improve forest health, while creating new income opportunities and building wealth that stays in rural communities."

Vilsack won't announce any new initiatives by USDA while in Glasgow, but he will formally launch a multinational “innovation” coalition that will promote the use of technology, including genetically engineered crops, to increase productivity while reducing agriculture’s climate footprint.

Other countries involved in the coalition include the United Arab Emirates, Brazil, Denmark, Australia, Singapore, Uruguay, Singapore and Israel.

Vilsack has separately announced a Coalition for Sustainable Productivity Growth for Food Security and Resource Conservation that includes major ag groups as well as the UN Food and Agriculture Organization and the countries of Australia, Brazil, Dominican Republic, Ghana, Honduras, Liberia, North Macedonia and the Philippines.

The Biden administration’s 30x30 effort — formally dubbed the "America the Beautiful" initiative — also is likely to be featured at the summit, according to the USDA official. The plan, which has been met with controversy in many rural areas, calls for having 30% of U.S. land under conservation by 2030, a goal that depends in part on the increased conservation spending that is part of the Build Back Better plan.

"There's international interest in (30x30), and I would expect it to come up" at COP26, the USDA official said. "From our standpoint, it is all about voluntary conservation," a point likely to be emphasized in Glasgow, they said.

Critics have raised concerns that the initiative would entail a government takeover of private land; USDA officials have emphasized that meeting the goal will rely heavily on the use of voluntary conservation programs. A report issued in May outlining the initiative called for honoring “private property rights” and supporting “the voluntary stewardship efforts of private landowners and fishers.”

Agriculture has played little role in international climate negotiations until recently. It wasn’t until the 2015 climate conference in Paris that food and beverage companies started to get involved, said Reed.

Previously, the focus of the negotiations was on reducing emissions from select sectors such as energy and transportation. Now, “we’ve moved away from a world in which we're all focused on the highest emitting sectors, and we have readily acknowledged and are really trying to push to ensure that every single sector reduces emissions and that we are tracking what every sector is doing,” said Reed.

A series of events in Glasgow on Nov. 6 will include sessions with government and business leaders talking about a plan to "tackle deforestation via sustainable agricultural commodities," according to the conference agenda. Another session will showcase the role of "nature and land-use" in national emission-reduction pledges and climate adaptation plans.

Meanwhile, food and agriculture interests will be watching COP26 for progress in developing rules around international emissions accounting, a requirement of Article 6 under the Paris climate agreement.

The rules are needed to spur private investment in carbon reductions, track progress in meeting national pledges, known as nationally determined contributions, or NDCs, and to prevent double-counting of emissions reductions by countries and the private sector, said Reed.

Biden's new pledge presumably includes emissions reductions that private companies, including those in the food and beverage sector, will make, but there is currently no common mechanism for those companies to report the emissions reductions they are making in the United States.

“We need to begin to discern between what the private sector is doing and what governments are doing,” Reed said.

School meals suffer due to supply chain disruptions

A shortage of food delivery drivers and warehouse workers is forcing schools to streamline lunchtime options as orders fail to arrive on time for meal preparation or wholesale manufacturers simply can't provide items schools need.

As a result, schools across the U.S. are having to pay more for items, find new local suppliers, and even coordinate with local restaurants or grocery stores to get items they need, school meal directors say.

Diane Pratt-Heavner, a spokesperson for the School Nutrition Association, which represents roughly 50,000 schools across the country, said the supply problems are happening nationwide.

“We hear a lot about what you’d call center-of-the-plate items, the entree items, but we’re also hearing about big problems with disposable and paper goods,” Pratt-Heavner told *Agri-Pulse*.

These paper goods include lunch trays, paper boats, and utensil packs, she said. Pratt-Heavner said she is also hearing food companies are having to streamline their inventory because they don't have enough raw ingredients or because of labor shortages.



Diane Pratt-Heavner, SNA

“I heard of an apple juice company that had to suspend production because they didn't have enough cardboard for the juice boxes and they didn't have the caps for the juice bottles,” Pratt-Heavner said.

Kristan Delle, director of food services for the Upper Dublin School District in Pennsylvania, said she used to provide the school menu a month in advance but has now had to release it week to week because she doesn't know if she may have enough of a certain food.

She said things like chicken and potatoes are hard to find, which forces her to change menus weekly. Finding ingredients such as whole grain pasta, pizza sauce or condiment packets is even harder.

If a distributor is out of what a school needs, the grocery store or Costco isn't an alternative because of the amount of food necessary, Delle said.

“To put it into perspective, if I menu pasta in my district I need 500 pounds of pasta,” Delle told *Agri-Pulse*.

School food directors have been concerned about the disruptions for some time. Some 97% of school meal program directors said in an SNA July survey they were fearful of continued supply chain disruptions during the pandemic. About 65% said it was a “serious concern.”

In Wisconsin, Michael Gasper, the director of nutrition services for the Holmen school district of Holmen, said he began having trouble accessing certain foods back in August, and mostly it's been whole grain items, baking items, chicken, and beef patties.

“It seems like it has gotten worse now in the last month, where it's kind of a crapshoot what you are going to get,” he told *Agri-Pulse*.

Gasper said he is doing whatever he can to make sure nutrition is not being sacrificed. For instance, the school raises its own chickens, pigs, and cattle through its FFA program. Gasper said the cattle will be going to the butcher in the next two weeks and will be used to make hamburger patties.

In Washington state, Wendy Weyer, nutrition director at Bellevue school district, said milk is hard to find.

“We only receive deliveries once a week from our prime distributor. Through our milk vendor we had been receiving two, and sometimes three-times-a-week deliveries. That put a strain on us on how we were going to store a week's worth of milk,” Weyer told *Agri-Pulse*.

She said the local distributor has not been able to keep up with demand. Weyer said the vendor has a shortage of drivers and noted in mid-September the company said they did not have cartons for the milk.

Stan Ryan, president and CEO of Darigold, a farmer cooperative milk processor, said finding labor is a problem in the industry. While his cooperative is not having a problem keeping up with milk demand, he said smaller companies are.



Stan Ryan, Darigold

"If you look at the amount of labor to fill 1,000 gallons of little containers versus 1,000 one-gallon containers, there is a tremendously larger amount of labor that goes into producing the school milk and distributing the school milk that has smaller stops and deliveries," he told *Agri-Pulse*.

He said smaller deliveries like transporting milk cartons take a lot more transportation time because there are more stops compared to transporting many gallon jugs of milk to a retail store or large food service. Ryan said it's more difficult in rural areas.

Some local farms are being forced into prioritizing more food, more product, and more deliveries out the door, through shorter concentrated delivery routes, Ryan noted.

Weyer said her district also can't get the paper goods it needs to serve meals, so she's resorted to shopping at Costco once a week.

“At this point, I have to have something I can put food on,” she said.

Gaspar said he’s been thankful for USDA waivers which have allowed him to purchase substitute food items if certain more nutritious options are not available.

Delle said the USDA foods program has saved her school meals program. She uses a fresh fruit and vegetable program run by the Department of Defense which allows USDA entitlement dollars to be used for fresh produce purchases. Delle also participates in the direct delivery of commodities from USDA.

“I’ve been so thankful for the foods furnished directly through USDA,” she noted. But she said sometimes those foods do not come in at the start of the school year. It could be until December because of production and shipping schedule issues, Delle said.

On Sept. 29, the Department of Agriculture announced it would offer up to \$1.5 billion in funding to help schools, noting supply chain disruptions remain unpredictable. USDA is planning to buy ag commodities through the Agricultural Marketing Service and distribute them through the Food Nutrition Service.

“USDA is taking an all-hands-on-deck approach to supporting the school meal programs, taking action to help schools get out in front of possible challenges and addressing other issues that arise from all angles and with all available resources,” Agriculture Secretary Tom Vilsack said in the release.

USDA still needs to provide more details on how it plans to spend the \$1.5 billion to help schools. Gaspar said whatever the administration can do to ease regulatory burdens would be helpful.

As manufacturers start to catch up with producing items needed to supply meals this school year, Delle fears they will have future problems not knowing what next school year will bring.

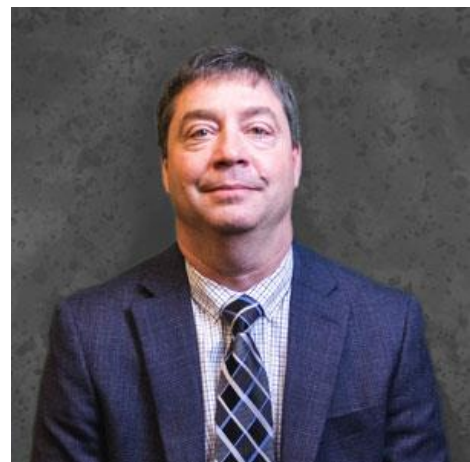
“Without understanding what the status of next school year is, the manufacturers are going to collapse if they overproduce and we don’t order those foods,” Delle said.

Drought taking a lasting toll on ranchers and western dairies

The drought stretching through much of the Great Plains is pushing cattle ranchers and dairy farmers to the breaking point – and sometimes past it – as producers scramble to feed their animals.

Scorched pastures and dwindling supplies of hay are forcing producers, whether it’s ranchers in Montana or dairy farmers in California, to pay exorbitant amounts to try to save their cows.

After a summer of scorching drought, 36% of all of the hay-growing areas in the U.S. are still experiencing drought, according to the latest USDA assessment. About 86% of the hay area in Utah is in drought conditions and



Jay Bodner, Montana Stockgrowers Association

83% of those fields are designated as “extreme drought.” Farmers in Montana, Idaho, Wyoming, Oregon and California are in similar situations.

Federal and state governments are working to help, but the lack of rain this summer and continued dryness is still adding stress to low-margin operations. There’s only so far ranchers can take their cattle in search of unburnt pasture, and there’s only so much banks are willing to lend to pay for feed costs.

“There’s a lot of people that didn’t get enough hay for this year,” said Jan McDonald, a rancher and treasurer for the Montana Cattlemen’s Association. “And it has been so dry that pasture grounds are just gone. It’s been so dry ... the grass breaks off the root.”

McDonald says she’s been spending her days for the past three months scouring nearby states and Canadian provinces to try to source hay for the group’s members, but has had little success.

Just two days ago she heard back from a source in Ohio willing to sell a few hundred tons of hay for \$135 per ton. That was a reasonable price in the current environment, McDonald said. A rancher not far from her recently paid \$250 to a seller in South Dakota. But the Ohio seller wanted \$5,000 for freight.

“No one can afford that,” she said.

Jay Bodner, executive vice president of the Montana Stockgrowers Association, said his members looked as far as Tennessee to get hay. Tennessee, he said, is having a great year for hay, but in the end, it was just too expensive to have it hauled to Montana.

On the state level, the governors of Wyoming, North Dakota, South Dakota and Montana all issued executive orders expanding the allowable driving time for truckers to bring down transportation costs.

The Utah Department of Agriculture and Food, recognizing the impact of drought on its ranchers and farmers, began trying to connect buyers and sellers of hay by listing them on its website.

On the federal level, USDA expanded a program that helps pay for water hauling costs to also include feed transportation costs. Last month, USDA’s Farm Service Agency began pledging to reimburse drought-stricken ranchers for 60% of feed transportation costs “above what would have been incurred in a normal year.”

The department is also allowing emergency haying and grazing on land idled under the Conservation Reserve Program in hundreds of counties where drought has been pervasive.

The ability to hay CRP land was a big help to ranchers, said Bodner, but a lot of ranchers were still forced to liquidate cattle.

“That did help dramatically,” Bodner said, “but ultimately, there was a pretty significant herd reduction and we’re not done yet. We’ll probably see a 30% reduction in our cow-calf numbers in Montana this year, which is a pretty big number.”

Dennis McDonald (Jan McDonald’s brother-in-law) owns a 30,000-acre ranch with roughly 900 cows, 900 calves, 50 bulls and 150 horses in Big Timber, Montana, and he says the drought and extraordinary high cost of feeding his animals are forcing him to sell many months before he wants to.

“I don’t usually sell them until March or April, but I’m going to have to sell them now into this poor market,” he said.

As much as the ranchers are hurting from drought, west coast dairy operations have it worse, says Anja Raudabaugh, CEO of Western United Dairies, a trade group that represents farmers that produce more than 60% of all the milk produced in California.

California dairy farmers would grow about half of the feed for their cows, whether it's hay, corn, sorghum or other crops, but the severe drought has forced many to pay exorbitant prices for what they normally harvest.

“Right now, we’re paying almost double what we were paying a year ago for rolled corn,” Raudabaugh said.

And it’s putting a lot of operations out of business or forcing smaller producers to sell to larger ones.

“We’re looking at a pretty dire situation,” she said, and stressed that banks “are looking at the feed situation and are just not willing to take the risk of extending those operating loans any longer.”

And it’s even tougher for the organic operations, most of which are in Marin and Sonoma counties in Northern California.



Anja Raudabaugh, Western United Dairies

“They would normally source a lot of their organic hay and feed from Oregon or Washington,” she said, but drought has crippled supply there too. “We’ve lost about 6% of the organic dairies already just in the last six months.”

There’s a lot less hay to be sold this year and prices are very high, said Mark Anderson, CEO of Washington-based Anderson Hay and Grain.

The year started with unusually low stocks, and the situation just worsened with the drought, he said. The company, which also has an operation in Oregon, sells domestically and internationally and everyone is paying more this year.

“Without the drought, we were going into a year where hay stocks were pretty cleaned up and inventories were tight,” Anderson said. “This year you had two things happen – low stock and then we had drought. There was just a lot of hay production that didn’t happen because of the drought.”

The big winners, he added, were the growers who brought crops to market. After the generally low hay prices last year, some producers were able to make good money this year.

“That part of it’s been good,” he said.

Dramatic expansion in renewable diesel production could pose challenge to some biodiesel producers

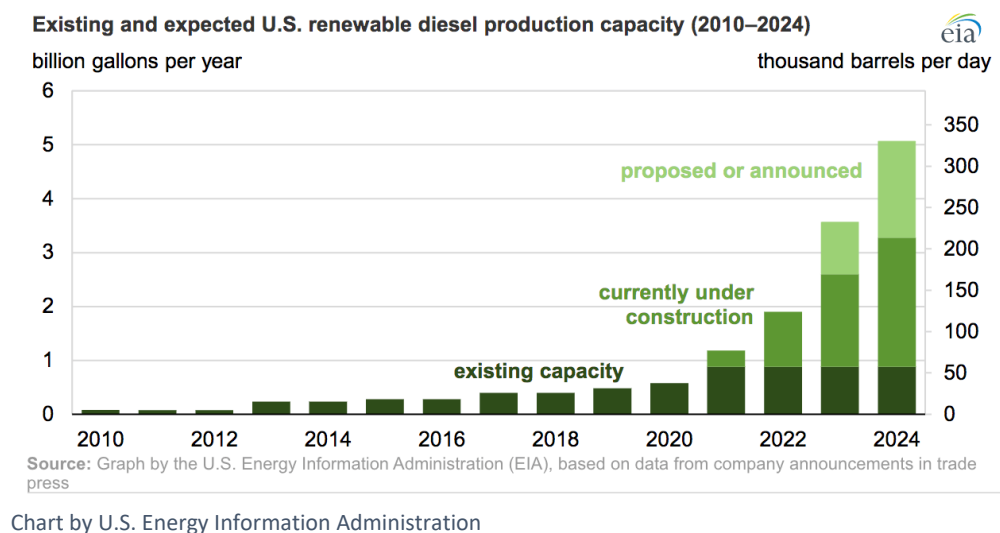
One by one, oil refiners hoping to ride the wave of demand for renewable diesel created by California's low carbon fuel standard have announced ambitious plans for their own plants. But, the surge will likely come at a cost to biodiesel producers, who often rely on the same soy-based feedstocks to create their product in much smaller plants.

Renewable diesel, a hydrocarbon, is chemically identical to petroleum and can be dropped into diesel engines without needing to be distilled or mixed. It's become popular in California, thanks to its ability to qualify for three different incentives: Renewable Identification Number (RIN) credits through the federal Renewable Fuel Standard Program, credits through California's Low Carbon Fuel Standards program and tax credits through the federal Biodiesel Tax Credit Program (BTC).

According to the U.S. Energy Information Administration (EIA), the United States had the capacity in 2020 to produce about 600 million gallons of renewable diesel per year. But a slate of upcoming projects from major refiners like Chevron, Love's, Marathon and Phillips 66 could bring that total up to a capacity of 5.1 billion gallons per year.

“We're in the midst of a true boom in renewable diesel production, whose full dimensions are still to be determined,” said Scott Irwin, an economist at the University of Illinois who has been tracking the biofuel industry. “Renewable diesel is clearly eating into the market share of traditional FAME (Fatty Acid Methyl Esters) biodiesel, but so far FAME is hanging in there better than I expected.”

Because biodiesel, unlike renewable diesel, is a fatty acid methyl ester, it needs to be blended with petroleum-based diesel to work in engines. Usually, it is blended at rates between 2% and 20% of diesel fuel by volume, according to the EIA.



Both biodiesel and renewable diesel are often made using soybean oil, which is currently selling for high prices. Soybean oil was priced at \$0.62 per pound on Oct. 26. At the same time last year, it cost \$0.34 per pound.

Irwin said he's seen it reach as high as \$0.70 per pound; so far he's been shocked that biodiesel plants have been able to stay open with prices as high as they are.

“My models suggest that the financial losses for FAME biodiesel at these feedstock prices should be pretty much putting them out of business and they're not going out of business yet,” Irwin said.

Scott Gerlt, the economist for the American Soybean Association, told *Agri-Pulse* both types of fuels can get similar credits under the U.S. and California’s Renewable Fuel Standard programs, but renewable diesel tends to sell at higher prices, at least in California.

“The credits they can get are close to the same, but at the end of the day, the renewable diesel sells for a higher price in that California market, which gives it an advantage whenever competing on the marketplace for soybean oil,” he said.

According to Gerlt’s calculations, the average size of a biodiesel plant — based on both the facilities currently operating and the plans that have been announced — is 224 million gallons per year, almost 10 times the size of the average biodiesel plant, which can process 29 million gallons per year.

The closure of one Houston plant operated by Renewable Energy Group was announced by the company last month. Additionally, Darling Ingredients Inc. sent out a press release in March stating its intent to close two of its plants, one in Montreal, Quebec, Canada, and the other in Butler, Kentucky,

“We made the decision to shut down operations of our two biodiesel plants due to unfavorable biodiesel industry economics and there are no current plans to resume biodiesel production at these facilities in the future,” Randall Stuewe, the chairman and CEO of Darling Ingredients, said in the release. “The closure of the facilities will create additional feedstock for growth of renewable diesel in our DGD Joint Venture.”



Paul Winters, NBB

However, some biodiesel plants with capabilities to use non-soy feedstock sources are finding ways to weather the period of high prices.

Western Iowa Energy is located in Wall Lake, Iowa, and can produce 45 million gallons of biodiesel every year. The facility is set up to use a variety of other feedstock sources: camelina, corn oil, vegetable oil, pork fat, poultry fat and beef tallow. Bill Horan, chairman of the company’s board of directors, said no matter where it comes from, a fat molecule is a fat molecule.

“There is competition and there may be more competition,” he said. “That's why it's important to have a multi-feedstock plant, so you can switch back and forth and keep your cost of inputs low.”

The effects of the increasing competition, along with trade disruptions and COVID-19, have not been uniform across the industry. Because biodiesel producers can use different feedstocks, some have been more heavily impacted than others, said Paul Winters, the director of public affairs and federal communications for the National Biodiesel Board, which will soon be rebranding to Clean Fuels Alliance of America.

“It’s a very complicated picture,” Winters said. “Producers who specialize in certain feedstocks are going to feel it differently from other producers that are integrated and have their own supplies of either cooking oil or soybean oil.”

Winters also noted that some of the renewable diesel production facilities have not built out the capacity to refine and degum soybean oil, and, as a result, impact a different segment of the market. These processors, he said, look for refined, bleached and degummed oil.

According to both Irwin and Gerlt, it’s unlikely that all of the planned renewable diesel projects will get built. But, even if half of the projects are completed, Irwin said it’s still an enormous increase in renewable diesel production that could come at a cost to some biodiesel producers.

“It’s hard for me to see much of a significant place in the renewable energy space for FAME biodiesel in the future,” Irwin said. “It will be much diminished, whatever it is.”

Silvopasture touted for benefits to climate, livestock

Silvopasture, a historical practice that involves integrating trees into pasture-based systems for livestock, appears to be growing in popularity as farmers look for ways to help keep animals happy and healthy while maintaining or increasing revenue.

The practice involves either establishing new tree stands in pastures or thinning trees in already forested stands. The benefits include reducing heat stress for animals, reducing feed costs through the planting of edible trees, and increasingly, reducing the risks of wildfire.

“I think it’s going to be a really important part of both curbing effects of climate change and increasing carbon sequestration,” says Mary-Thomas Hart, environmental counsel at the National Cattlemen’s Beef Association. And when it comes to the impacts of climate change, “wildfire’s one of those things that comes to the top of everyone’s list.”

A growing body of research has shown the benefits of silvopasture, which is increasingly being looked at as a way to address climate change, or at least mitigate its effects. “Scientific evidence of the ecological and economic benefits of silvopasture has been accumulating rapidly over the last few years,” according to a 2019 article from *Agroforestry Systems*. “Most studies have shown an overall increase in system productivity, including greater productivity of animals.”

“Silvopasture, as an integrated land use practice, has been proven to be economically and environmentally sustainable both at small and large scales,” the paper, which examined 28 other papers on the subject, concluded.

“The production benefits to the farmer are significant enough to make this a valuable practice,” says Austin Unruh of Trees for Graziers, a Pennsylvania company working with “dozens of farmers” in Lancaster County to help them establish silvopasture systems. “It’s one of the top climate change solutions and we can get a lot more people on board with it, too.”



Matt Smith, Forest Service

The federal government does not have solid data on whether the practice is increasing, although anecdotally it appears to be. Researchers also say it can be used on farms of any size and with any type of animal.

“We’ve found that people are using silvopasture with goats, sheep, chicken, turkey, bison,” says Matt Smith, a research ecologist at the Forest Service's National Agroforestry Center. “Any livestock that forages you can have in a silvopasture system,” he says. Smith says the Forest Service is teaming up with USDA's National Agricultural Statistics Service on a survey to better estimate how many producers are using silvopasture.

But “it’s not going to be for everybody,” says John Fike, a professor at Virginia Tech who has studied silvopasture extensively. Advocates of the practice say they often run up against skepticism about planting trees when throughout history, farmers have removed trees to create arable land.

But trees help stabilize the soil and reduce runoff, as well as contributing to higher levels of organic matter in the soil and more fungal activity, says Unruh.

One of the farmers he’s working with is Tim Sauder, who operates a small dairy farm on about 55 acres of Pennsylvania land in southern Lancaster County. There, Sauder and his wife make Greek yogurt and other dairy products from their herd of about 16 cows.

He says he has gotten some questions from neighbors.

“We're already weird in that we direct market,” Sauder says before playfully recounting a question he received.

"You're planting mulberry trees?" a neighbor joked. "Never in my life have I planted a mulberry tree. They just come up anyway."

But despite the friendly skepticism, Unruh says two of Sauder’s neighbors “are jumping on board” and adding trees to their dairy operations.

“Lancaster County, Pennsylvania, right now is probably the hot spot of silvopasture,” Unruh says.

Sauder was able to get started with trees by partnering with Unruh to pursue, among other funding sources, a grant from the National Institute of Food and Agriculture’s Sustainable Agriculture Research and Education Program. The grant has paid for trees to be established at five farms in Lancaster County. The Chesapeake Bay Foundation is recording and evaluating the results at the farms, including different methods of protection from the grazing cattle — plastic tubes vs. metal cages, for example.

On a recent fall day, Sauder, Unruh, a CBF representative and a reporter took a stroll through Sauder’s operation, filled with about 3,000 trees — including honey locust, persimmon, mulberry, black locust, willow, and hybrid poplar. Some had shot up to 14 feet tall since being planted in March 2020.

The locusts are nitrogen-fixing, “which will help the grass grow,” Unruh says, adding that the cows “can eat the leaves from many of those trees, especially the willow.” Mulberry leaves, he says, have more protein than alfalfa and are easily digestible. In addition, the honey locusts will drop sugary pods that can be consumed, saving on feed costs.

Shade for the animals offers an obvious benefit, Unruh says. “Heat stress is a huge, huge profit loss because of lack of production,” he says. The trees also provide shade for forage, helping the grass avoid stress during what’s known as the “summer slump.”

“By this time next year, there’ll be some real shade,” Sauder says. For now, when the cows want to cool off, they go to the barn.

“It should definitely help the bottom line” by reducing hay costs during the winter, he says. “Or we’ll buy more cows because we’ll be able to feed more with the tree fodder.”

Sauder says he is “not doing a whole lot better than breaking even, but we’re getting there. That has as much to do with marketing as anything else.” He acknowledges that his system “takes a lot of hands-on attention to detail every day.”

He moves his cows one to five times a day from one to another of his roughly 60 paddocks to prevent any one patch of forage from being overgrazed. The paddocks are separated by lines of trees and electric fencing.



Silvopasture in Lancaster County, Pennsylvania.

It’s difficult to know how much silvopasture can contribute to carbon sequestration because that calculation depends on so many factors — primarily the species of the tree and the soil it’s being grown in. So, participation in the growing carbon markets could be complicated.

“I think it has a lot of potential” for carbon sequestration, Fike says, but more data need to be gathered.

“The faster the tree grows, the faster it will sequester carbon,” Unruh says. “So, black locusts, hybrid willows, hybrid poplars and the like will be the fastest-growing species. Others, like persimmon or honey locust, won’t grow as fast, but will live longer.”

Unruh said it cost \$60,000 to plant the 3,000 trees on Sauder’s farm — \$20 per tree. The funding was contingent on Sauder planting 1,555 stems/acre, but “for those farmers planting at a lower density, they’d be looking at more like \$10-\$25 a tree (depending on whether they did the planting themselves or had a contractor do it, and depending on the trees they used).”

“Willows and poplars are really easy to propagate, so they’re cheap,” Unruh says. “Seedling trees are also fairly cheap (say \$2-6, depending on quantity purchased). It’s when you get into grafted trees that you get up into the \$30/tree realm.”

Fike said producers should look not just at the value of trees as lumber but as a food source for the animals and a possible revenue source for the grower. Sauder, for example, has planted pecans.

There have been studies done on the financial aspects of silvopasture, but Fike says most of them are site-specific.

“We can see a lot of benefits, but we don’t necessarily have them quantified in dollars and cents,” he says. There are numerous studies, he says, showing animals gain more weight when they have access to shade, but then the question becomes, how should the trees be spaced to provide that benefit?

“It’s really a challenge to put a fine point on what these systems are worth,” he says.

“We have often associated straight corn rows and uniform height and all that other kind of stuff as good agriculture, or manicured pasture. And I’m not sure that that’s necessarily the best relative to efficient resource use and managing for multiple outcomes” such as promotion of wildlife habitat, or the return of pollinators and birds.

“We could do a lot more with our agricultural lands to continue to make them productive for food, while also supporting these other functions,” Fike says. “And if that gives us better water infiltration, or holds the bank and the soil together better, that’s great. We should be looking for those outcomes and how do we increase the productivity of this land while lowering its negative environmental outcomes?”

Cost-share assistance is widely available for many silvopasture practices in most states, according to a look at payment rates in states under USDA programs such as the Environmental Quality Incentives Program, Conservation Stewardship Program and Regional Conservation Partnership Program.

But not all — Idaho, for example, only offers support for silvopasture to support wildlife habitat, and Pennsylvania offers no financial help for either thinning trees or establishing them in the state, meaning proponents such as Unruh have to get creative with financing.

However, many states offer broad assistance. Nevada and Maryland, for example, cover 18 different silvopasture practices including tree establishment.

News Briefs:

Newsom’s Climate Adaptation Strategy targets pesticides. The California Natural Resources Agency has issued a draft report for adapting the state to climate extremes. Among the many action items the Newsom administration is pursuing are goals for reducing pesticide use. Success will be measured by the amount of reduction in pounds and acres treated with specific pesticides over the next five years. To support this effort, the report calls for more funding into research for alternative practices and for technical assistance. In contrast to that goal, the next action item in the plan calls for protecting agriculture from invasive pests expanding into California as a result of climate change. But the document offers no details on how and when to achieve that. The proposal also calls for protecting farmland from development and for continuing the programs the administration laid out in its sustainable agriculture budget package, including prioritizing climate-smart agricultural practices among disadvantaged farmers and minorities.

California to further restrict 1,3-D use. Department of Pesticide Regulation Acting Director Julie Henderson last week directed staff to add more control measures for applications of the fumigant 1,3-D. Applicators will likely need to use tarps to meet the new mitigation targets for minimizing exposure to bystanders. A pilot project is looking at other measures that can achieve the same emissions reductions. Staff are also exploring local and regional control measures to reduce exposure. The current DPR requirements for protecting bystanders include a 100-foot buffer zone. Henderson notes in her letter that recent spikes in air monitor readings for

1,3-D could result in acute health effects in children. 1,3-D controls nematodes, insects and disease in the soil and is applied to fruit and nut trees, strawberries, grapes, carrots and other commodities.

Heavy rains welcome, but don't end drought. Parts of California received record-breaking rainfall over the past week, but "it's too early to tell" how much impact that will have on the current drought, says UC Davis professor Jay Lund, co-director of the Center for Watershed Sciences. Precipitation totals were as much as one-half the total received in all of last year (a water year runs October to September), he said. While last year was dry, the rain event also can be measured as about 20% of the average annual rainfall. "That's appreciable," Lund said. Reservoirs that were dangerously low will now stop losing water and begin gaining it, he said, and water that percolates through sandy soils will help with groundwater recharge. But Lund said the major storm after so many dry months "illustrates very well" how the climate in the west, and California in particular, has "lots of wet and lots of dry." He added that it is "not inconceivable" to have storms and flooding in the middle of a drought and this is only the very beginning of the wet season.

Agriculture dominates list of top cooperatives. Some of the most well-known names in agriculture are atop the list of 100 largest cooperatives by revenue compiled by the National Cooperative Bank. CHS Inc. tops the list with more than \$28 billion in 2020 revenue. The other two co-ops in the top three are ag giants Dairy Farmers of America and Land O'Lakes with \$17.8 billion and \$14 billion in revenue, respectively. Growmark (\$7.5 billion in 2020 revenue) and Ag Processing Inc (\$4 billion) are also in the list's top 10. Overall, agriculture-specific co-ops account for 49 of the list's 100 businesses, but that figure could arguably be higher if it included ag lenders like CoBank (number 11 on the list) or Farm Credit Services of America (number 29), which are classified as "Finance." The list also includes grocers and retailers critical to the business of farmers and ranchers like ACE Hardware Corp. and Do-it-Best Corp. While the 2021 list reported agriculture's dominance in the usage of the cooperative system's member-owned business model, it also reported some shifts in revenue between 2019 and 2020 when compared to last year's figures. The report's figures showed a drop of about \$3.5 billion in revenue for CHS. DFA and Land O'Lakes both reported increases – about \$2 billion for DFA and roughly \$100 million for Land O'Lakes. Overall, the cooperatives in the report brought in about \$2.1 billion less in assets in 2020, but the value of co-op assets jumped \$133.7 billion. The report is released every October during National Co-op Month.

Ralph Lauren Foundation, Soil Health Institute announce \$5M regenerative cotton grant. A new grant from the Ralph Lauren Corporate Foundation and the Soil Health Institute centered around regenerative cotton-growing practices aims to eliminate 1 million tons of carbon dioxide from the atmosphere by 2026. The \$5 million grant will establish the U.S. Regenerative Cotton Fund (USRCF), which will distribute funding to cotton farmers in Arkansas, Texas, Mississippi and Georgia for adopting practices like cover cropping and no-till. According to a release, the program is also eyeing expansion into Alabama, North Carolina, Missouri, California and Oklahoma. "We are very grateful for the opportunity to promote soil health and to assist cotton farmers across the U.S. with storing more carbon, building drought resilience, and mitigating the very effects of climate change that are impacting us all," Cristine Morgan, the chief scientific officer for the Soil Health Institute and leader of the U.S. Regenerative Cotton Fund, said in the release. According to the release, the USRCF will measure soil health and carbon sequestration using an approach created by the Soil Health Institute called "soil health and soil carbon targets." Soil Health Institute Sustainability Specialist Byron Rath told *Agri-Pulse* in an email that this approach establishes "place-based, measurable goals for farmers that provide them with specific details on what level of soil health is possible for their particular soils, along with the benefits from achieving that higher level of soil health." "Because soil

carbon is one important measure of soil health, we can also determine the carbon sequestration capacity of any given soil," Rath's email said. Additionally, the release said the fund will work with Historically Black Colleges and Universities to "develop increased access to career paths in decision-making positions in U.S. agriculture and establish mentoring programs to help prepare the next generation of scientists and leaders in agriculture."

Farm Hands West: Goehring retires after 55-year career

After a 55-year career in the California agriculture industry, **Leroy Goehring** has retired. Goehring grew up on a farm in Bakersfield, Calif., where his family grew potatoes, cotton and citrus. After graduating from Fresno State College in 1966, Goehring returned home to work on the farm and help his dad run the family business—Goehring Citrus. In 1971, he took a job with California Almond Orchards and in 1973 he moved to New York City to take a job with Sunkist as a sales representative. He later returned to the San Joaquin Valley at Sunkist's National Account Sales office but soon moved to Seattle with the company. He returned a second time to California to work for Paramount Citrus, and later worked for Landberg Marketing and Lindemann Produce. The last stop in his career was working for Royal Vista Marketing in Visalia, Calif., a company he worked for 21 years.



Elaine Howle

Elaine Howle will retire at the end of the year after 21 years as the California state auditor. Howle is a certified public accountant and a certified government financial manager. She earned a bachelor's degree in sports management from the University of Massachusetts and a Master of Business Administration from California State University, Sacramento.

Western Growers Senior Vice President of Science **De Ann Davis** has been selected to serve a second two-year term as a member of the National Advisory Committee on Microbiological Criteria for Foods (NACMCF). Davis has been with Western Growers since 2020 and brings more than 25 years of experience in the development and execution of technical global product safety programs, including food safety, quality assurance and regulatory compliance.

President Joe Biden has announced his intent to nominate Jessica Rosenworcel and Gigi Sohn as commissioners of the Federal Communications Commission. Biden has also designated Rosenworcel to be chair of the Federal Communications Commission, which she currently serves as acting chair, and if confirmed she would officially be the first woman in history to serve in this role. Rosenworcel previously served as a commissioner since 2012. Before joining the agency, she served as senior communications counsel for the Senate Committee on Commerce, Science, and Transportation, under the leadership of Sen. **John D. Rockefeller IV**, D-W.V., and Sen. **Daniel Inouye**, D-Hawaii. Sohn currently serves as a distinguished fellow at the Georgetown Law Institute for Technology Law and Policy and is a Benton senior fellow and public advocate.

Biden has also announced his intent to nominate **Martha Williams** as the director of the Fish and Wildlife Services at the Department of Interior. Williams currently serves as the principal deputy director of the U.S. Fish and Wildlife Service. Before that, she served as the director of the Montana Department of Fish, Wildlife and Parks from 2017 to 2020.

The Senate has confirmed, by voice vote, **Cindy Hensley McCain** as Ambassador to the United Nations Agencies for Food and Agriculture.

The International Dairy Foods Association has promoted **Colin Newman** to chief of staff. Newman has been at IDFA for the past four years and previously was the director of industry relations and political affairs. Before joining IDFA, Newman worked at the U.S. Chamber of Commerce as the manager for corporate relations. Newman succeeds **Heather Soubra**, who will transition out of the organization at the end of the week to begin a new endeavor focused on executive coaching and organizational wellbeing. **Tracy Boyle** has also been promoted to chief of people strategy. Boyle has been with IDFA for close to 35 years and in that time has served in a variety of essential positions. Most recently, she co-developed the Women in Dairy community, which stands at nearly 600 members today.

Lucy Hynes has joined Chairwoman **Debbie Stabenow**'s, D-Mich., staff on the Senate Agriculture Committee as senior counsel and will be handling Commodity Futures Trading Commission issues. Hynes previously served as counsel to CFTC Commissioner **Dan Berkovitz** for three years and also served as a senior trial attorney in the CFTC's Division of Enforcement. Before joining the CFTC, Hynes spent nine years in private practice focusing on securities and derivatives enforcement and litigation.

Alex Noffsinger has also joined the Senate Agriculture Committee staff as a policy analyst, assisting professional staff on commodity agriculture, crop insurance, livestock and dairy, trade, specialty crops and labor. Noffsinger comes to the Hill after working at The Russell Group as a legislative manager. He has also worked for the National Association of State Departments of Agriculture.



Imby Abath

The U.S. Grains Council (USGC) has welcomed **Imby Abath** and **Amelia Iliohan** to its Washington, D.C. office. Abath joins the Council as the new manager of innovation and sustainability within the trade policy and biotechnology department. Most recently, Abath received her master's from the University of California-Davis researching the feasibility of biodiesel processing. Iliohan has joined the industry relations team as the new manager of industry relations. She comes to USGC from the American Farm Bureau Federation, where she was the project coordinator for the leadership, education and engagement team.

Katrina Bishop has been promoted to director of public affairs at the Association of Equipment Manufacturers, succeeding **David Ward** who has taken a new job with Amazon Web Services as the public relations manager for sustainability. Bishop joined AEM in March 2019 as the public relations manager.

Russell Stokes has been promoted to the new CEO of Kind North America. He replaces **Mike Barkley**, who left the company earlier this year. Stokes was previously the chief growth officer for Kind. Before that, he was the chief strategy officer for Mars.

Benson Hill, a food tech company, has added **Linda Whitley-Taylor** and **Molly Montgomery** to its board of directors. Montgomery currently serves as the board director for Wilbur-Ellis, The Wine Group, and Custom Made Meals. On Benson Hill's Board, she will chair the sustainability and governance committee charged with oversight of environmental, social and corporate governance across the company. Whitley-Taylor currently serves as the executive vice president and chief people officer of Change Healthcare.

Shakuntala Haraksingh Thilsted of Trinidad and Tobago and Denmark was honored as this year's World Food Prize laureate. She received the award because of her work in harnessing the

use of aquaculture to fulfill the nutrition needs of rural communities, specifically women and children, in Asia and Africa. She was the first to discover high levels of essential micronutrients and fatty acids found in the small native fish species commonly found and consumed in Bangladesh. Thilsted currently serves as WorldFish's global lead for nutrition and public health.

Sarah Evanega, professor at the Boyce Thompson Institute for Plant Research and the founding director of the Alliance for Science, was the recipient of the Borlaug CAST Communication Award, which was awarded during the 2021 World Food Prize. The BCCA is presented to an individual who contributes to the conversation around the advancement of science in the public policy arena.

The National 4-H Council has added **Jacqueline Applegate**, president of North America Crop Science for Bayer, to its board of trustees. Applegate joined Bayer in 1992 and was previously serving as the head of environmental science and vegetable seeds before serving in her current position.

Bunge Limited has appointed **Michael Kobori** and **Kenneth Simril** to its board of directors. Kobori is currently the chief sustainability officer at Starbucks Coffee Company and Simril is the former president and chief executive officer of Fleischmann's Ingredients.



Sarah Evanega

Alexa Hergenröther was elected as the new chair of Novihum Technologies. She succeeds **Rolf Nagel**, who will now act as her deputy. She most recently served as the managing director of K+S Minerals and Agriculture GmbH, the largest potash producer in Western Europe.

After a long battle with a brain disease, **Gary MacDonald** passed away on Oct. 14. After college in 1976, MacDonald joined the family business, MacDon — a harvesting equipment company, and spent the next four decades investing his passion in the employees, partners, and customers. In lieu of flowers, donations can be made in MacDonald's memory to the Sunnybrook Foundation supporting the Dr. Sandra Black Centre for Brain Resilience and Recovery, 2075 Bayview Avenue, KGW-01, Toronto, ON, M4N 3M5.

Best regards,

Sara Wyant
Editor

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