

These Pennsylvania farmers say they do try to stem Chesapeake Bay pollution — and it's expensive



By SCOTT DANCE

BALTIMORE SUN |

FEB 06, 2020 | 6:00 AM
| DURLACH, PA.

On farmland his family has worked since the 1720s, Chris Landis remembers his grandfather dumping mounds of cow manure wherever he pleased. The man died at 92 without ever laying eyes on the estuary into which that waste eventually flowed: the Chesapeake Bay.

So Landis can understand why, today, Pennsylvania farmers are so often cast as the villains in the decades-long effort to clean up the bay. He hopes that will change. The 32-year-old recently spent more than \$100,000 to modernize the family's Lancaster County dairy farm, which he took over a decade ago. Instead of washing down the hill or sitting in an earthen pit, excrement from his heifers and calves is meticulously collected, held in a concrete-lined, fenced-off tank. It's only spread on alfalfa and hay fields under the right conditions, and when soil tests indicate fertilizer is needed.

But Pennsylvania is so far from keeping its promises to reduce pollution that farms, urban runoff and sewage systems send downstream to the bay that [Maryland is pursuing a lawsuit against the commonwealth and the U.S. Environmental Protection Agency](#) to force the issue. While the Chesapeake is healthier than it has been in decades, the contaminants still flowing into it mean it remains degraded and ecologically vulnerable.

Many in communities north of the Mason-Dixon Line say it's not that they aren't trying to improve water quality — they just face challenges, including many that Maryland doesn't.

There are political obstacles, with a legislature reluctant to pass expensive environmental mandates akin to those Maryland's majority-Democrat General Assembly often imposes. Farmers say they are less likely to seek government help to modernize their operations, and there is less money available for that sort of help in Pennsylvania, though there are proposals to change that.

And if farmers can afford to tackle projects like Landis' — that is, if a sustained slump in milk prices hasn't left them cash-strapped — those efforts often don't get reported to environmental regulators, farmers here say.

Pennsylvania officials say the state is getting less credit than it deserves in the bay cleanup.

Downstream in Maryland, environmentalists and politicians have bristled at excuses. [Now they worry that the EPA, under President Donald Trump, won't step in.](#) And they say it looks increasingly likely it's going to take legal action to get Pennsylvania to catch up on pollution reductions it promised a decade ago.

“Pennsylvania needs to know that if they are not going to close these gaps, they will face enforcement actions by the EPA,” Sen. Chris Van Hollen, a Democrat from Maryland, said.

In the crossfire, some are working toward progress. A partnership led by Turkey Hill Dairy, based in Conestoga, is connecting farmers with grant money to make water-quality-minded farm improvements, and rewarding them by paying more for their milk.

“These rules are here to stay,” he said. “You’ve got to adapt or die.”

PENNSYLVANIA FARMER CHRIS LANDIS

The initiative helped Landis pay for modern housing for his heifers and calves, and is assisting others with manure storage, tree planting and stream fencing.

Landis says the investment on his farm will pay off, trusting that millennials and other Earth-conscious shoppers will seek out and pay more for milk from farms like his — farms that are quickest to accept new environmental regulation. “These rules are here to stay,” he said. “You’ve got to adapt or die.”

Though the Chesapeake's health has improved in recent years, scientists say it's only because of new policies and practices that have reduced the amount of nitrogen, phosphorus and sediment washing into it from farm fields, sewage systems and pavement. The nutrients feed algae blooms that block sunlight, eventually stripping oxygen from the water, while sediment clouds water and smothers life.

All six states in the bay watershed, plus the District of Columbia, have work to do to meet pollution reduction targets, set at a level that waterways could ecologically withstand, by a 2025 goal. But Pennsylvania has by far the most to do, and though it doesn't touch the nation's largest estuary, what happens in the state has an outsized impact on the bay.

The commonwealth accounts for more than a third of the 64,000-square-mile area that drains into the Chesapeake, mostly through the Susquehanna River. Meanwhile, Pennsylvania is responsible for more than two-thirds of the reductions in nitrogen needed across bay jurisdictions by 2025. Its share of the watershed runs down the middle of the state, and doesn't include population centers around Philadelphia, Pittsburgh and Allentown.

“We’ve been very public about, ‘Hey, we’ve got work to do.’ We’re not dismissing the magnitude of it. We’re not dismissing that there is work to do.”

RUSSELL REDDING, PENNSYLVANIA'S AGRICULTURE SECRETARY

Lancaster County is perhaps ground zero for the state's pollution concerns. Farms cover half of its acreage, and are being asked to contribute more than 90% of the county's reductions in nitrogen and phosphorus. The county is home to more cows than the rest of Pennsylvania combined, said Chris Thompson, manager of the Lancaster County Conservation District.

That means more than 8 million pounds of nitrogen reduction is needed in Lancaster County alone over the next five years — while farms across all of Maryland are being asked to send about 6 million fewer pounds of nitrogen into the bay over the same period.

While Maryland has fewer than 50,000 cows, Lancaster County has more than 100,000. Still, many Pennsylvania farmers say they feel they're unfairly targeted.

Don Ranck, president of the Lancaster County Farm Bureau, questions whether forests contribute more pollution to the bay than farms (though research shows forests reduce erosion and filter pollutants). George Hurst, of Oregon Dairy in Lititz, says his family farm has practiced no-till planting for decades to reduce soil and nutrients lost to runoff.

And then there are farmers like Hurst and Lisa Graybeal, of Graywood Farms in Peach Bottom, seeking to reduce manure pollution — and make money — by selling the waste in compost. They also work to conserve nutrients and soil by planting cover crops in the winter.

“I have a big problem with blaming agriculture all the time,” Graybeal said. “It gets tiresome. A lot of improvements have been made.”

Chris Thompson, manager of the Lancaster County Conservation District, says about 70% of the county's farmers have developed required plans to control manure and sediment runoff. He aims get that to 100% within the next few years, counting on farmers seeing that practices to improve water quality also make their farms more efficient.

“If they see the benefits of the practices, they'll embrace them,” Thompson said. Another challenge, though, is that there isn't much financial assistance for farmers to afford upgrades on their land. Gov. Tom Wolf, a Democrat, last year signed a state farm bill that includes \$2.5 million to help farmers pay for projects and practices that can reduce water pollution, part of \$23 million in agriculture spending. In contrast, Maryland spends nearly \$400 million a year on projects linked to bay restoration, including \$9 million a year to help farmers better manage manure.

Pennsylvania officials acknowledge there is a more than \$300 million funding gap to pay for all the projects they laid out in their plan to improve water quality over the next five years. And the state has identified only enough initiatives and solutions to address about three-fourths of the reductions in nitrogen pollution it committed to achieving in a bay cleanup blueprint established in 2010.

The cleanup is only expected to get more difficult as the 2025 goal approaches. The Trump administration recently narrowed the EPA's oversight of water pollution

across the country, rolling back Obama-era regulations that extended the agency's authority to include tiny, ephemeral streams. And climate change is forecast to intensify precipitation over the region, meaning there could be more years ahead like 2018, which had record-setting rainfall across the watershed.

The Wolf administration last year proposed a tax on natural gas extraction it said would raise \$300 million a year, helping to pay for environmental initiatives as well as everything from high-speed internet access to disaster recovery to transportation projects. But that proposal has not advanced through the state's Republican-majority legislature.

"We've been very public about, 'Hey, we've got work to do,'" said Russell Redding, Pennsylvania's agriculture secretary. "We're not dismissing the magnitude of it. We're not dismissing that there is work to do."

Bay advocates say that for progress to be made, more money has to be found. Milk prices have been depressed for the past five years and are only starting to rebound, farmers say, and with deep political divisions across purple Pennsylvania, there is little expectation that elected leaders will find money to spare.

"It's going to have to come from somewhere," said BJ Small, a spokesman for the [Chesapeake Bay Foundation](#) based in Pennsylvania. "We don't have a track record that it's coming from the legislature."

That's where Turkey Hill Dairy's initiative came in. Working with the Alliance for the Chesapeake Bay and the Maryland & Virginia Milk Producers Cooperative, which buys from farmers like Landis and sells to producers including Turkey Hill, the dairy is paying more for milk when farmers adopt conservation practices that reduce their environmental impact. John Cox, who stepped down as the dairy's CEO last year but remains on its board, would not say how much of a premium the farmers get, but said Turkey Hill absorbs the cost and sees it as the right thing to do.

Meanwhile, the bay alliance is helping connect those farmers with grant money to help pay for the projects, including planting forested buffers around streams and building manure storage or concrete pads for livestock. The partnership has raised more than \$2 million.

That included \$60,000 for Landis. He has been adapting the historic family operation continuously since he bought a herd of cows right out of college. He expanded into raising chickens in 2016, and has been inviting school groups and birthday parties to help reconnect agriculture with the community.

He remembers seeing a farming magazine cover with an image of a mom carrying grocery bags beneath the words, "Meet your new boss," and he took it to heart. To him, that means investing in a higher quality product and a smaller environmental footprint.

"We're doing our best," Landis said, "and we're working to be better every day." His operation is known as Worth-the-Wait Farms.

Scott Dance writes about the environment and the weather. Since joining The Sun in 2012, he has covered snowstorms and hurricanes, crabs and oysters. His award-winning 2017 series "Power struggle" detailed how a green energy subsidy program benefits polluting industries. He has two degrees from the University of Maryland and is a Timonium native.