

# H Hourglass Quarterly

Spring 2022



**CHESAPEAKE BAY: HOW IS  
LANCASTER DOING WITH OUR  
CLEAN WATER GOALS?**

**& WHAT YOU CAN DO TO HELP**

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# Letter from the Executive Director

Hello Hourglass Community,

This issue of the Hourglass Quarterly focuses on an important legacy issue for Lancaster County: **clean water**. You'll read about Pennsylvania's efforts to reduce pollution to the Chesapeake Bay by the EPA's 2025 deadline, and local efforts in Lancaster County.

As you'll read, we have our work cut out for us.



But we're fortunate to have **incredible local leadership** in Lancaster County working towards clean and clear water. The Lancaster Clean Water Partners, municipal officials, farmers, nonprofits, business leaders, and community members are collaborating locally and implementing solutions on the ground. Farmers are developing conservation plans. Landowners are planting trees. Townships are reducing stormwater pollution. Streams are being restored.

Watching these collaborative efforts makes me proud to live in a community where we don't just talk about problems—**we all pitch in to be part of the solution**.

This issue includes **action steps**. I encourage each of you to do something this year to support clean water for drinking, wildlife and recreation in our community. Whether it's installing a riparian buffer, contacting your legislator, or participating in Lancaster Water Week—**we all need to support the Herculean efforts happening in Lancaster to steward our shared resources**.

Respectfully,

Diana Martin  
Executive Director

**P.S. Save the Date:** Hourglass is hosting a Community Forum and Reception entitled "Food for Thought" on April 27 at the Ware Center focused on innovative ideas in food and agriculture. Learn more and get tickets at [HourglassLancaster.org/FoodForThought](http://HourglassLancaster.org/FoodForThought).

# The State of the Bay:

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## How is Lancaster doing with our clean water goals?



In 2010 the Environmental Protection Agency (EPA) mandated the six Chesapeake Bay states, including Pennsylvania, and the District of Columbia develop plans to reduce pollution to the Bay by 2025. This effort, known as Chesapeake Bay Total Maximum Daily Load (TMDL), included pollution limits for nitrogen, phosphorus and sediment, and milestones to achieve those reductions. The EPA also included additional restrictions and mandates if not achieved.

So with less than four years remaining, what is the progress and what does this mean for Lancaster County?

### **The State of the Blueprint**

According to the Chesapeake Bay Foundation's recently released "2021

State of the Blueprint" report, if progress continues at its current pace, the Bay partnership will not achieve the required pollution reduction by 2025. Maryland, Pennsylvania and Virginia account for roughly 90% of the Bay's pollution, and while Maryland and Virginia are mostly on-track to meet their commitments per the report, Pennsylvania is lagging behind. From 2009 to 2020, watershed states reduced the amount of nitrogen reaching the Bay by 40%, leaving 60% of the work to be accomplished in five years.

### **Pennsylvania's Challenges & Successes**

Much of the shortfall is in Pennsylvania, largely because the great majority of nutrient and

sediment runoff comes from the 33,000 farms and increasingly developed areas in Pennsylvania's portion of the Bay drainage. According to the Bay models, all states have struggled to control farm runoff. Pennsylvania developed a Watershed Implementation Plan (WIP) to address the reductions they need to achieve.

In the TMDL, Pennsylvania is required to reduce nitrogen loads by 32.5 million lbs. and phosphorus by 0.85 million lbs. As of 2020, Pennsylvania has reduced nitrogen pollution by 6.77 million lbs. and phosphorus pollution by 0.3 million lbs.

According to the Chesapeake Bay Foundation, more than 90% of Pennsylvania's remaining pollution reductions must come from agriculture. While farmers are adopting conservation practices and eager to do their part for clean water, a massive influx of technical and financial assistance is still required to provide the resources to put these practices in place at the scale and pace necessary.

Across the watershed, the wastewater sector remains the one area of noteworthy success. However, the loss of farms and forests to development, coupled with more severe storms linked to climate change, pose new challenges for stemming rising pollution from urban and suburban runoff.

In January the Pennsylvania Department of Environmental Protection updated Pennsylvania's Watershed Implementation Plan (WIP) to outline how the state will meet its

2025 targets. Yet funding remains a significant challenge. As proposed, the plan estimates the need for \$521 million a year until 2025 for implementation. However, compared to existing resources, there is a shortfall in funding of nearly \$324 million a year. Although the plan contains several proposed funding sources, none of them have been passed by the legislature.

### **Local Solutions: Lancaster County a Key Component**

Lancaster County is responsible for 21% of Pennsylvania's total reduction goals. The Lancaster Countywide Action Plan, managed by the Lancaster Clean Water Partners and the Lancaster County Conservation District, outlines Lancaster's path for reducing 11.7 million lbs. of nitrogen and 524,000 lbs. of phosphorus by the 2025 deadline. The Lancaster Clean Water Partners, and countless community members, have shown incredible leadership in collaborating and implementing on-the-ground solutions to provide clean and clear water for our community.

### **Lancaster's plan centers around four initiatives:**

- **Agriculture**
- **Stormwater**
- **Riparian buffers**
- **and Data management and monitoring**

## A Focus on Agriculture

Lancaster County expects to reduce 7,195,000 lbs. of nitrogen from the agriculture sector, representing more than 99% of the total nitrogen Lancaster expects to reduce by 2025.

Some of the focus areas in Lancaster's agriculture sector have been working with farmers to establish soil conservation and water quality plans, helping farmers implement practices such as cover cropping and reduced tillage that prevent erosion, and building manure storage facilities. Approximately fifty percent of Lancaster County farms now have conservation plans.

An example of collaborative efforts having a positive impact on these goals, the Lancaster Farmland Trust successfully launched a program linking preservation and conservation efforts across the county. This program offered funding to fast-track farmers on the preservation waiting list who opted to install conservation practices simultaneously. Leveraging \$490,000 from National Fish and Wildlife Foundation, Lancaster Farmland Trust pre-

served five Lancaster farms and completed conservation practices on those properties. Combined, those improvements will lead to the prevention of 13,703 lbs. of nitrogen, 1,176 lbs. of phosphorus and 572,338 lbs. of sediment from flowing into the Chesapeake Bay every year.

Lancaster's plan calls for planting and maintaining 1,000 new acres of riparian buffer every year until 2025. In the spring and fall of 2021, technical service providers planted 120 acres of new buffers. According to the September 2021 edition of the Lancaster Countywide Action Plan, "there is still unmet demand from landowners for more buffers and maintenance especially after intense weather events."

## Green Infrastructure Improvements

While many of the local improvements are focused on agriculture, urban communities and municipal officials have also been reducing stormwater runoff. For example, West Hempfield Township was awarded funds from the Lancaster Clean Water Fund to reduce

### Sector Reductions

Lancaster County has identified reductions within four sectors within their planning template: agriculture, developed, natural, and septic. Projected land use changes and population changes results in increases within the wastewater sector. Lancaster County has identified practices that result in total reductions of 7.26M lbs of nitrogen and 345K lbs of phosphorus.

Sector	Nitrogen (lbs.)	Phosphorus (lbs.)
Agriculture	-7,195,000	-326,000
Developed	-113,000	-6,000
Natural	-86,000	-38,000
Septic	-18,000	-
Wastewater	+150,000	+24,000
<b>Total Reductions</b>	<b>-7,261,000</b>	<b>-345,000</b>

runoff in Murry Ridge Park in the West Branch Little Conestoga Creek watershed. For the project, the township diverted stormwater into a vegetated swale, installed a bioretention basin, planted a riparian buffer with volunteers, added landscaping to attract pollinators and songbirds, retrofitted the dry detention basin to a dry extended basin, and installed a natural trail and educational signage. This project is expected to reduce 610 lbs. of nitrogen per year, 16 lbs. of phosphorus per year and 18,626 lbs. of sediment per year.

### Overall: Current State of Lancaster's Clean Water Goals

Lancaster County is working hard to achieve clean water for its residents, future generations, and neighbors downstream. With increasing momentum, capacity, and success stories, Lancaster is demonstrating unprecedented collaborative leadership. But it has a long way to go. More miles of impaired streams exist in Lancaster County than any other county in Pennsylvania according to a 2022 draft re-

port by the Pennsylvania Department of Environmental Protection. Of the 1,432 stream miles assessed in Lancaster County, 1,286 miles — or 89.4% — are considered impaired. A waterbody is considered impaired when it fails to meet standards that allow for regular uses, including supporting recreation and aquatic life, as well as providing drinkable water and consumable fish, according to DEP.

A December 2021 snapshot of Lancaster County's Action Plan shows current loading rates are 25.7 million lbs. of nitrogen and 1.16 million lbs. of phosphorus annually. By 2025 Lancaster County needs to reduce 10 million lbs. of nitrogen and 358,000 lbs. of phosphorus. Lancaster County has developed a plan to reduce 7.26 million lbs. of nitrogen by 2025, which is 73% of the goal and 345,000 lbs. of phosphorus, which is 96% of the goal.

"Organizations across Lancaster County have been making incredible progress towards our common goal of clean and clear water by 2040," said Allyson Gibson, Director of Strategic Partnerships and Programs at

#### Current Conditions

Lancaster County is one of 34 counties in Pennsylvania's Chesapeake Bay Watershed that have developed Countywide Action Plans. Current loading rates are 25.7M lbs of nitrogen and 1.16M lbs of phosphorus annually. By 2025 Lancaster County needs to reduce 10M lbs of nitrogen and 358K lbs of phosphorus.

#### Nitrogen (N)

Current Load (lbs):

25,730,000

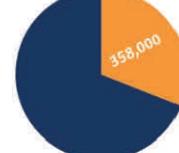


Planning Target (lbs): 15,729,000  
Reduction Goal (lbs): 10,001,000

#### Phosphorus (P)

Current Load (lbs):

1,155,000



Planning Target (lbs): 797,000  
Reduction Goal (lbs): 358,000



Image: Green Infrastructure Improvements at Murry Ridge Park. Image courtesy of Lancaster Clean Water Partners.

Lancaster Clean Water Partners. "We have seen fantastic success, but we have a lot of work to do ahead of us. Lancaster County is the biggest opportunity for restoration success in the Bay watershed. Only through collaborative efforts and innovative approaches will we see that success, so we invite everyone to participate as part of the solution."

### EPA Review

The EPA is currently reviewing Pennsylvania's updated plan to restore the Chesapeake Bay. "We have begun a thorough review to determine if the plan measures up to Pennsylvania's commitments to do its share to restore downstream waters and, in the process, improve the health of local rivers, streams, and drinking water," said EPA Mid-Atlantic Regional Administrator Adam Ortiz in a statement issued in January. "However, EPA is serious about taking greater federal action to promote progress in Pennsylvania" if the amended plan does not meet 2025 cleanup targets or provide confidence

to meet its goals, he said, citing greater federal oversight of permits, increased inspections and enforcement actions as potential options.

In a letter emailed to state officials on Dec. 23, 2021, Ortiz laid out the seriousness of the expectations, that "existing resources and policies to control pollution in Pennsylvania do not include successful agricultural conservation measures established by downstream jurisdictions, such as a dedicated state agriculture cost share program, improved manure management practices, or requirements for stream buffers or fencing to keep animals from accessing local waters."

### Looking Forward

While Pennsylvania faces a monumental task in reducing pollution to the Chesapeake Bay, Lancaster County has strong leadership and commitment to these goals. Clean water will take community-wide action and we encourage everyone to get involved.

## How You Can Help

- **Mark your Calendar:** Lancaster's 6th annual Water Week is June 3-11, 2022. Water Week features lots of lectures, volunteer opportunities, and hands-on learning. Learn more at [www.lancasterwaterweek.org](http://www.lancasterwaterweek.org).
- **Speak up for Clean Water:** Ensure that your municipal leaders know clean water is a priority for your community. Request zoning and ordinances that reflect practices that result in local water quality improvements.
- **Apply:** For Lancaster Clean Water Partners Watershed Leadership Academy, a 12-month program packed with watershed content, field investigations, and an overnight retreat on the Chesapeake Bay. Apply at [LancasterCleanWaterPartners.com](http://LancasterCleanWaterPartners.com) by October 6, 2022.
- **Contact Your Legislators:** Legislation before the Pennsylvania General Assembly proposes that \$250 million of the \$7 billion in American Rescue Plan money the Commonwealth received go into a Clean Streams Fund. Half of the new fund would support the Agricultural Conservation Assistance Program (ACAP). The ACAP is a statewide agriculture cost-share program and an opportunity to fund local farm projects through county conservation districts.
- **Plant Trees on Your Property:** The Lancaster County Conservation District's Tree Sale is happening now. Pre-order by March 14, 2022 at <https://lancaster-county-conservation-district.square.site/>.

*Learn more: Access the 2021 State of the Blueprint at <https://www.cbf.org/how-we-save-the-bay/chesapeake-clean-water-blueprint/2021-state-of-the-blueprint/>. Access Lancaster's Countywide Action Plan at <https://lancastercleanwaterpartners.com/lancaster-countywide-action-plan/>. Sector Reductions and Current Conditions graphs provided by the Pennsylvania Department of Environmental Protection.*



# HOURGLASS FIRST FRIDAY FORUMS

## Highlights From Recent Forums

**Sponsored by:**



### December 3, 2021—Child Care

#### Challenges in Lancaster

Panelists: Amanda Burns, Vice President Education, CAP; Madeline Reynolds, Director, Lancaster Early Education Center; Heather Dige, Executive Director, Lancaster Rec; Andrea Heberlein, Executive Director, PA Early Learning Investment Commission; Louisa Paradiso, Thrive to Five Caregiver and Parent; and Mary Ann Garrett, Director, Owl Hill Learning Center



A recent survey found that 92% of child care centers in Pennsylvania are short-staffed, and 25,000 children are on waitlists across the commonwealth. Our expert panel addressed the need for early childhood education, the status of centers here in Lancaster County, the impact of insufficient child care on our local economy, and how we can balance appropriate wages for early education providers while still offering affordable child care to our community.

### January 7, 2022—Ask the Commissioners



Presenters: Lancaster County Commissioner Ray D'Agostino, Chairman, and Lancaster County Commissioner Joshua Parsons, Vice-Chairman

The Lancaster County Commissioners addressed important community issues such as the new prison, the new Health Advisory Council, Lancaster's American Rescue Plan Funds, county staffing, affordable housing, clean water and more.

## **February 4, 2022—City of Lancaster**

Presenter: City of Lancaster Mayor Danene Sorace

Mayor Sorace highlighted the accomplishments from her first term in office and outlined her priorities for 2022 including welcoming 11 Ameri-Corps VISTAs, developing the first comprehensive plan in nearly 30 years, historic investments in affordable housing, launching new technology tools, and allocating American Rescue Plan funds.



**Watch forum recordings at [HourglassLancaster.org](https://HourglassLancaster.org) or on our Youtube channel. To attend forums like these, become an Hourglass member at [HourglassLancaster.org/membership](https://HourglassLancaster.org/membership).**



# **FOOD FOR THOUGHT *Forum***

**A P R I L • 2 7 • 2 0 2 2**

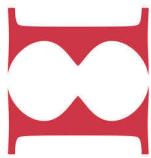
**Save the Date: Hourglass Community Forum  
Food For Thought: The Future of Food & Agriculture**

**April 27 | 5 PM | Ware Center**

Lancaster County has long been considered a national leader in agriculture and a destination for foodies. But how do food and agriculture connect to our health, the environment, entrepreneurship, and the future of our community? The Food for Thought Forum will present regional thought leaders to inform and inspire on the future of food.

Evening includes reception & program. For more information and to purchase tickets visit **[HourglassLancaster.org/FoodforThought](https://HourglassLancaster.org/FoodforThought)**. Sponsorship opportunities available.

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