



CHESAPEAKE BAY
FOUNDATION

Saving a National Treasure



“The Chesapeake Bay restoration plan is fueling the most robust resurgence of underwater grasses and submerged aquatic vegetation in the world.”

—Study in the *Proceedings of the National Academy of Sciences*

FISCAL YEAR 2018

JULY 1, 2017-JUNE 30, 2018

IMPACT REPORT

The Chesapeake Bay Foundation is making history.

Decades of hard work and collaboration are starting to pay off. Pollution-reduction efforts are working. Underwater grasses continue to thrive. And dead zones are shrinking. The Bay is improving and becoming more resilient, but the recovery is fragile. The Chesapeake Bay Foundation (CBF) didn't let up in the fight for clean water this year. We advocated for state and federal Bay funding. We educated tens of thousands of students and teachers. And we launched new partnerships to grow the Bay's natural filters—oysters and trees—making critical strides in the Bay's health.

Together, we are bringing about the greatest environmental success story ever told. Please read on for some highlights of CBF's accomplishments during our fiscal year 2018.

2018 at a Glance

- Educated **33,623 students, teachers, and adults** through our award-winning environmental education programs, inspiring them to learn and take action on environmental issues.
- Launched the **Keystone 10 Million Trees Partnership**, a collaborative effort in Pennsylvania to add 96,000 acres of streamside buffers and reduce pollution across the state by 2025.
- Reduced pollution by working with **628 farmers and landowners** to install conservation practices.
- Launched a partnership to plant **10 billion oysters in the Bay by 2025**. The Chesapeake Oyster Alliance will bring together stakeholders across the watershed.
- Celebrated **30 years of Clean the Bay Day**, an annual shoreline and stream cleanup and one of the largest volunteer events in Virginia.



MIKE BUSADA/MIKE B PHOTOGRAPHY

Let's finish the job

Imagine a Chesapeake Bay that is teeming with healthy crabs, oysters, and menhaden, where native grasses flourish, forests line waterways, and the water is clear. This is all within reach. We are closer than ever before to saving the Bay. But we face tough opposition. This year, we launched partnerships to plant 10 billion oysters in the Bay and 10 million trees in Pennsylvania to finish the job of saving the Chesapeake Bay.

I have real hope for the future. I know that together, we can do this. We will keep up the fight to finish the job and save the Chesapeake Bay.

Will Baker
President

THE CHESAPEAKE CLEAN WATER BLUEPRINT

PROGRESS:
We're seeing results.

- GOALS MET:** Most states exceeded wastewater goals and some met goals for agriculture.
- IT'S WORKING:** Studies show improved grasses, healthy crabs, and reduced dead zone.

2017 MIDPOINT ASSESSMENT:
Where are we now?

CHALLENGES:
There's more work to do.

- LAGGING BEHIND:** Some states have not achieved pollution-reduction goals for agriculture and polluted runoff.
- ONGOING THREATS:** Climate change, air pollution, and the Conowingo Dam put our progress at risk.

Finishing the Blueprint: Halfway There

CBF's mission to save the Bay rests largely on one goal: to defend and advance the Chesapeake Clean Water Blueprint, a cooperative agreement between the U.S. Environmental Protection Agency (EPA) and watershed states to reduce pollution.

In it, the states committed to implementation of 60 percent of the practices necessary for Bay restoration by 2017 and finishing the job by 2025.

CBF's 2017 Midpoint Assessment of the Blueprint saw many successes. Maryland, Virginia, and Pennsylvania have exceeded their goals reducing nitrogen and phosphorus pollution from sewage treatment plants, thanks in large part to CBF's push to upgrade nearly 60 major sewage plants.

Despite good news, there is much work to be done. This year, CBF led the way in educating, advocating, litigating, and engaging local communities—all in pursuit of the Blueprint's goals, thanks to your support. And at the halfway mark, we must not lose the momentum toward our 2025 goals.

This year we:

- Commissioned a study showing Exelon Generation Company can mitigate a substantial portion of environmental impacts caused by the operation of its Conowingo Dam on the lower Susquehanna River.
- Launched an innovative new solution using green infrastructure to reduce stormwater pollution in Baltimore, Maryland.
- Saw legal victory when a federal judge ruled a stormwater charge as a fee, rejecting Norfolk Southern Railway Company's view that it was an unfair tax.



Advocates from across Virginia, including Claire Neubert and Rogard Ross (seen above), descended upon Washington, D.C., to lobby their representatives on a variety of clean-water causes. Thanks to their lobbying and the voices of more than 40,000 others, Congress restored funding for the Chesapeake Bay Program in a tremendous showing of bi-partisan support.

Saving the Chesapeake Bay Program with Your Voice

CBF members fought long and hard to save the EPA's Chesapeake Bay Program, which plays a critical role in coordinating and sustaining the federal and state partnership to restore the Bay and its rivers and streams.

The Trump Administration's proposed FY18 budget slashed funding for the Chesapeake Bay Program by 100 percent. In response to that news, we called on more than 40,000 CBF members and watershed residents who demanded their representatives stand up for the Bay. These constituents wrote letters, made phone calls, and rallied congressional offices in Washington, D.C. CBF is the only organization advocating in Washington, D.C., to ensure Congress provides consistent annual federal funding for Bay-critical programs.

Showing strong bi-partisan support, Congress restored the Bay Program's funding. The new federal budget, signed in March, fully funded the program—ensuring we stay on track to save the Bay.

With the support of our members and donors, CBF also:

- Assisted members of Congress in developing updates to the Federal Farm Bill to help farmers plant tree buffers and attract and leverage private sector partners and resources.
- Advocated for much needed revisions to the Forest Conservation Act in Maryland to stem ongoing forest loss, protect clean water, and support healthy communities.
- Promoted scientific management of Atlantic menhaden in Virginia and generated more than 14,000 comments to the Atlantic States Marine Fisheries Commission.
- Worked with state senators in Pennsylvania to introduce the Keystone Tree Fund bill, which will allow a voluntary checkoff box on driver's license applications in Pennsylvania to financially support tree-planting efforts.
- Advocated for the restoration of three-dimensional oyster reefs and sustainable oyster harvest management in Maryland and Virginia.

Growing Natural Infrastructure through 10 Billion Oysters and 10 Million Trees

Saving the Bay requires a collaborative effort. This year, CBF and allies announced ambitious partnerships committed to restoring two of the Bay's most effective natural filters—oysters and trees—to improve water quality, engage new advocates, and drive economic benefits across the region.



Chesapeake OYSTER ALLIANCE *10 Billion for the Bay*

CBF and more than 30 partners formed the **Chesapeake Oyster Alliance** to add 10 billion oysters in the Chesapeake Bay by 2025. The alliance is a coalition of non-profits, community organizations, oyster growers, and others focused on restoring oyster reefs, promoting science-based management of the oyster fishery, and supporting a growing oyster aquaculture industry.



Keystone 10 MILLION TREES PARTNERSHIP

In Pennsylvania, CBF along with more than 35 partners have launched the **Keystone 10 Million Trees Partnership**, a collaborative effort of national and local agencies, conservation organizations, outdoors enthusiasts, businesses, and citizens committed to planting 10 million new trees in priority landscapes in Pennsylvania. This bold effort will help the Commonwealth achieve its goal of planting roughly 96,000 acres of water-filtering forested buffers by 2025. By buffering approximately 6,250 miles of streams (an amount almost equal to one-third of the impaired streams in the Commonwealth), we will reduce millions of pounds of nitrogen, sediment, and phosphorus from Pennsylvania's waterways.

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CBF STAFF

“This partnership is what we need to save the Bay’s oyster population.”

—**Johnny Shockley**, Founding Partner of the Hoopers Island Oyster Company



KENNY FLETCHER/CBF STAFF

Restoration at a Glance

This year we:

- **Planted 34,482,519 juvenile oysters** on sanctuary reefs throughout the Chesapeake Bay.
- **Planted 21,521 trees** across the watershed.
- **Recycled 2,950 bushels of oyster shell.**
- **Restored 16.04 miles of stream buffers**—areas where trees, grasses, and other plants soak up pollution before reaching our local waterways.
- **Assisted 628 farmers and landowners**—throughout the region to implement conservation projects that will improve water quality and enhance farm profitability.



Clean the Bay Day founder Robert Dean, CBF Grassroots Manager Tanner Council, and Virginia Delegate Cheryl Turpin.

Thirty Years of Beautifying the Bay

June 2, 2018, marked the 30th Annual Clean the Bay Day, a CBF event that feels more akin to a state holiday than a coordinated trash pick-up program in Virginia. To celebrate this anniversary, CBF invited the event’s founders, other original members, and volunteers to gather just like they have for the last 30 years. Robert Dean, one of the founders of Clean the Bay Day, says he would like to see clean-up projects like this no longer necessary. “It would be great if ultimately, Clean the Bay Day could go away because our waterways will be clean.”

30 YEARS OF *Clean the Bay Day*



OVER 6.5 MILLION POUNDS OF DEBRIS

You'd need more than 270 garbage trucks to haul that much away!



REMOVED BY NEARLY 160,000 VOLUNTEERS

To host this many people, you'd need to combine the stadiums at University of Virginia, Virginia Tech, and Norfolk State University!



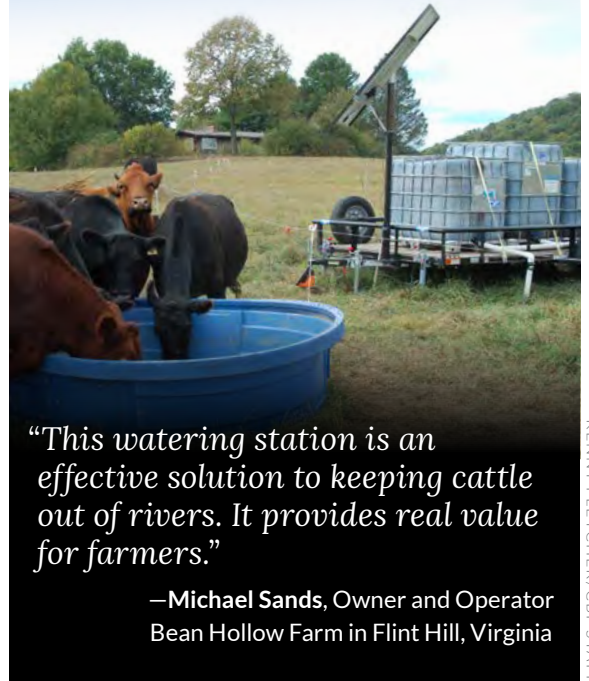
FROM OVER 7,600 MILES OF SHORELINE

Stretched in a straight line, this would take you from Virginia Beach, Virginia to New Delhi, India!

Innovative Watering Station for Farmers

This year, CBF partnered with farmers in Virginia to pilot solar-powered livestock watering stations. These stations provide an affordable, portable, off-the-grid solution for grazing cattle in fields lacking a permanent watering system. Watering stations reduce livestock pollution by keeping cattle waste out of waterways. Research also shows that cattle graze better when they don't have to travel as far for water. Good grazing management benefits the environment, helps farms be more productive, and keeps animals healthy.

CBF also helped farmers implement environmentally sound practices and more sustainable operations. We worked with 628 farmers across the watershed to plant buffers along waterways, fence livestock from streams and creeks, and expand livestock grazing efforts.



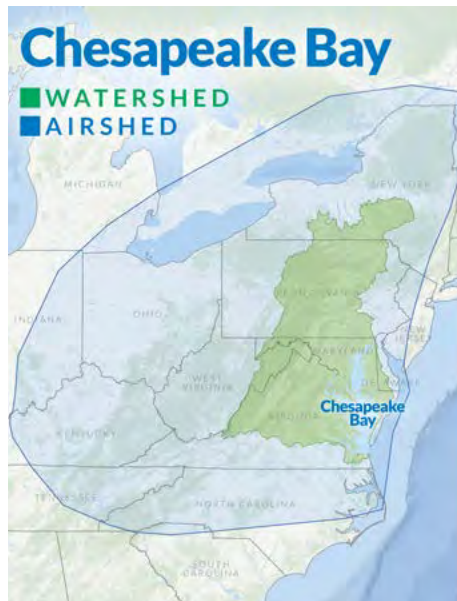
“This watering station is an effective solution to keeping cattle out of rivers. It provides real value for farmers.”

—Michael Sands, Owner and Operator
Bean Hollow Farm in Flint Hill, Virginia

Stopping Smog from Harming the Chesapeake Bay

Each year, more than 85 million pounds of nitrogen pollution—about one-third of the Bay’s annual total—comes from air pollution. The air over the Chesapeake region travels here from a much larger area than the watershed itself. At 570,000-square miles, this airshed is nine times the size of the watershed.

For more than a year, CBF and partners waited for EPA to rule on a Clean Air Act petition which asked EPA to require five states upwind of Maryland to continuously run existing pollution controls at 19 coal-fired power plants. Pollution from these power plants creates a human-health hazard and is



particularly dangerous for children and the elderly. When a ruling didn’t come, CBF along with the State of Maryland and partners challenged EPA in court for failing to comply with the Clean Air Act.

In June 2018, a judge ruled with CBF and said EPA must respond to Maryland’s petition within 60 days.

CBF’s litigation team also:

- Commissioned a study that found the Wheelabrator trash incinerator in Baltimore causes \$55 million in health problems. CBF is pushing to lower nitrogen from the incinerator as part of our broader initiative to reduce air pollution sufficiently to meet Blueprint goals.
- Worked to ensure the Atlantic Coast Pipeline construction and operation are held to the strictest environmental standards.
- Submitted comments to address environmental injustice in Buckingham County, Virginia. Dominion Energy is seeking approval to build a compressor station for the Atlantic Coast Pipeline in a predominantly low-income, African-American area which would create air pollution for surrounding communities.

A Real-Life Civics Lesson

Students in CBF’s Pennsylvania Student Leadership Program, which prepares highly motivated high school students to take action for clean water, got a real-life civics lesson when they came up with a plan to designate the Eastern hellbender as Pennsylvania’s official state amphibian. To raise awareness about the hellbender, whose numbers are dwindling due to warmer waters and polluted streambeds, the students drafted legislation and are meeting with elected officials to get the bill passed by Pennsylvania’s Senate and House and ultimately signed by Governor Tom Wolf.

On November 15, 2017, Senate Bill 658 passed in the Pennsylvania Senate and will be taken up by the House. In December, CBF Student Leaders were featured on the front page of *The Wall Street Journal* for their inspiring efforts to save the hellbender and restore clean water across Pennsylvania streams.

“They helped write the bill that praised the cold-water vertebrate as a ‘positive symbol for water quality efforts in the state.’”

*—The Wall Street Journal,
December 2, 2017*



A Great Advancement for Environmental Literacy

CBF knows that children learn best by doing. The Association of Independent Maryland Schools (AIMS), comprised of Maryland and D.C. private schools, officially adopted a sustainability statement to inform and advise their 125 member schools. This exciting announcement is the result of a two-year long CBF partnership with AIMS.

The sustainability statement drives environmental practices at individual schools directly, addressing not only teaching and learning, but also recommending actions for school leaders, boards of trustees, and independent school families. It specifically identifies watersheds as a focus area and encourages student investigation, action and service projects, and student advocacy.



MAILIA POWELL/CBF STAFF

In April, CBF hosted students from Newcomers English Language Learners initiative in Harford County, Maryland, in an effort to serve the diverse communities of the Chesapeake Bay watershed. Recent immigrants to the U.S. and the watershed, the students learned about oyster reefs, water clarity, polluted runoff, and the Patapsco River food web.

CBF STAFF



CBF'S EDUCATION PROGRAM: By the Numbers

33,623 students, teachers, and adults participated in CBF's environmental education programs last year.

15 outdoor education programs were offered, ranging from one-day experiences on the water to multi-night excursions to remote islands in the Chesapeake Bay.

69 students took part in CBF's Student Leadership program, participating in an immersive week-long field experience across the watershed.

5,740 students from Title I schools participated in CBF programs. CBF strives to

ensure that our learning experiences are accessible to all students, regardless of socio-economic status.

420 teachers participated in CBF's Chesapeake Classrooms program. These accredited professional learning courses prepare teachers to incorporate outdoor learning into their curriculum.

46 principals were inspired through CBF's Principals Environmental Leadership Program. Through field experiences, training, resources, and networking, principals, administrators, and other school leaders learn how to integrate environmental education into their school curriculum and community.



Four little blue herons with colorful plumage rest at North Point State Park in Baltimore County, Maryland.

In the last year, CBF has received several awards and hosted events aimed at raising awareness about our mission. Our success is due to our dedicated members and generous donors.

- CBF's President Will Baker received the **William K. Reilly Award**, which recognizes professionals who have made significant contributions towards advancing environmental protection and conservation.
- Senator Ben Cardin presented Will Baker with the **National Maritime Historical Society Distinguished Service Award** recognizing his achievements in restoring the health of the Bay.
- CBF's Brock Environmental Center received the **2018 U.S. Green Building Council Virginia Leadership Award for Exceptional Leadership** for "pushing the envelope of green design."
- Carmera Thomas, CBF's Baltimore Program Manager, was named a **Birdland Hero by the Baltimore Orioles** for her work on restoration projects in Baltimore City.
- In February, CBF hosted the 3rd annual **DC on the Half Shell**. More than 600 guests came together to celebrate the Chesapeake Bay and honor Washington College and Virginia Wesleyan University for their extraordinary leadership and commitment to educating the next generation of Bay leaders.
- In June, CBF hosted the 13th annual **Bands in the Sand** event at the Philip Merrill Environmental Center in Annapolis with a sold-out crowd of 1,600 local attendees.

CBF prides itself on demonstrating the highest standards of transparency, effectiveness, and accountability. We hold high ratings with the top charity rating organizations in the United States, including:



GuideStar Exchange
Platinum Participation Level



Independent Charities
Seal of Excellence



Better Business Bureau
Top-Ranked Charity



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6 Herndon Avenue
Annapolis, Maryland 21403
888-SAVEBAY
(888-728-3229)
member@cbf.org
cbf.org