

The Chesapeake Bay Foundation's
STRATEGIC PLAN

Phase III: Chesapeake Clean Water Blueprint and Making History

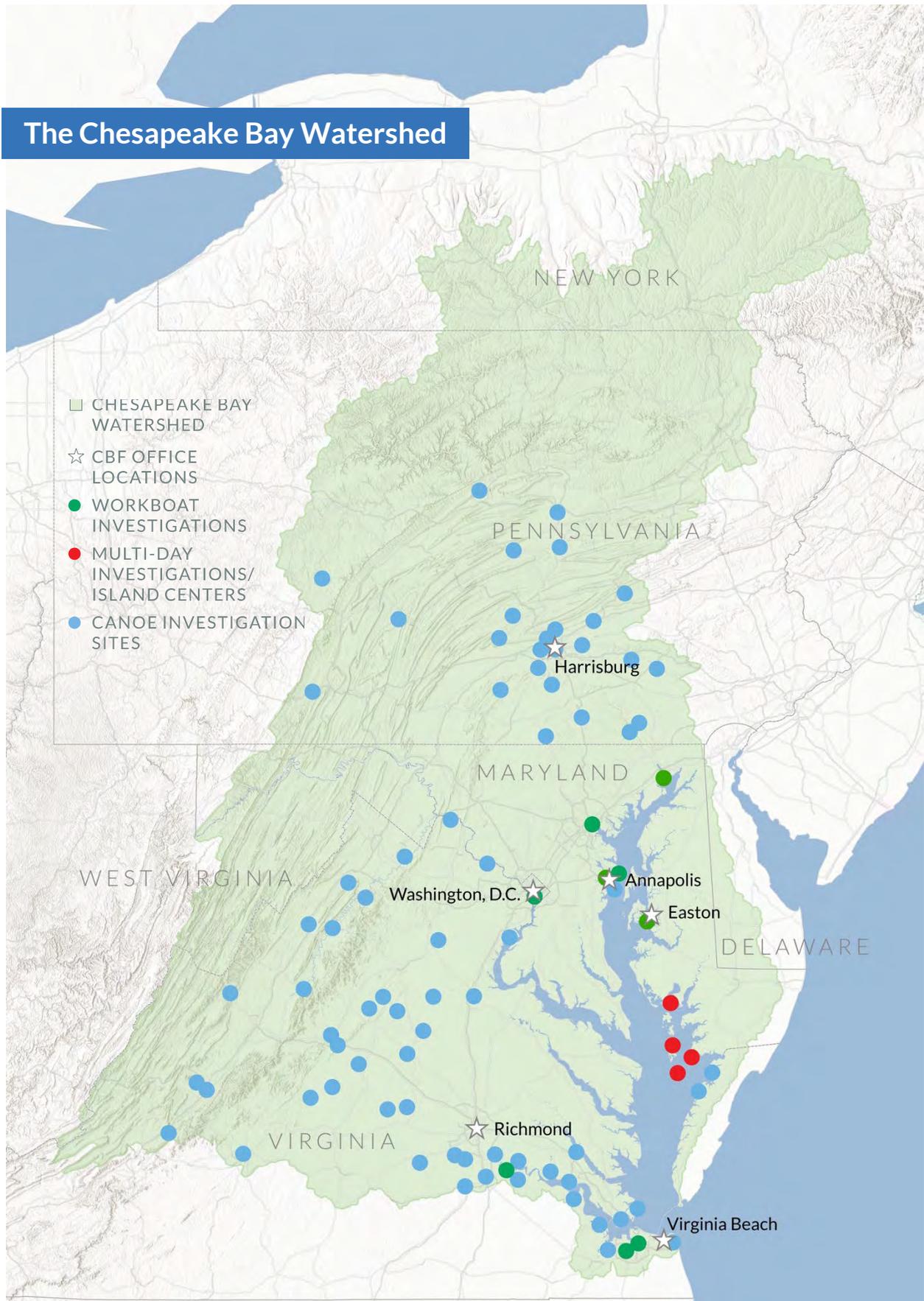
THE BEST HOPE FOR RESTORING CLEAN WATER THIS NATION HAS EVER SEEN



CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

STRATEGIC PLAN
2020-2024

The Chesapeake Bay Watershed





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2020–2024

Mission:

Save the Bay, and keep it saved, as defined by reaching a 70 on CBF's Health Index (See Appendix).

Vision:

The Chesapeake Bay and its tributary rivers, broadly recognized as a national treasure, will be a highly productive system, in good health as measured by established water quality standards (See Appendix). We will make history by achieving a world-wide model for resiliency, able to withstand the added impact of global climate change.

The result will be clear water, free of damaging impacts from nutrients and toxic contaminants, with healthy oxygen levels. The restoration of natural filters on both the land and in the water will provide resilience to the entire Chesapeake Bay system, including restoration of fin and shell fisheries.

Goal (Five-Year):

Federal, state, and local governments will fully enforce the Clean Water and Clean Air Acts and all other laws and regulations that are essential to the health of the Bay. Efforts to undermine these existing federal laws will be repelled.

The Chesapeake Clean Water Blueprint, the precedent-setting program for pollution reduction, will remain in place, with full implementation completed by 2025. This will achieve the equivalent of a 40 on CBF's *State of the Bay* health index. The additional loads brought about by climate change and other factors will be quantified and addressed.

2025 Outcomes:

1. Broad recognition that the Bay is a national treasure.
2. Saving the Bay is a national priority, as demonstrated by the full implementation of the Chesapeake Clean Water Blueprint.
3. 10 billion oysters will be planted in the Bay and its tributaries, supported by the Chesapeake Oyster Alliance.
4. 10 million new trees will be planted in the Commonwealth of Pennsylvania by the Keystone 10 Million Trees Partnership.
5. 1 million Voices for Clean Water will take action, particularly at the federal level, to demand clean water for the Bay.
6. CBF's programs, board, staff, and supporting constituency are diverse, reflecting the demographic profile of the region.

Strategies:

CBF will continue to defend and implement the Blueprint across the watershed, ensuring full implementation by 2025.

Pollution flowing down the Susquehanna, exacerbated by increasingly intense storms, may overwhelm progress made thus far by Maryland, Virginia, and the District of Columbia unless addressed. CBF will ensure the increasing pollution challenges caused by climate change are addressed while vigorously fighting to repel legislation and regulation that stands in the way of meeting the 2025 Blueprint goals.

Building on core capabilities and programs, CBF will achieve the goals of the *Making History* campaign (10 billion oysters in the Bay, 10 million new trees in Pennsylvania, and 1 million individual actions taken) in an effort to defend and implement the Blueprint across the watershed by 2025.

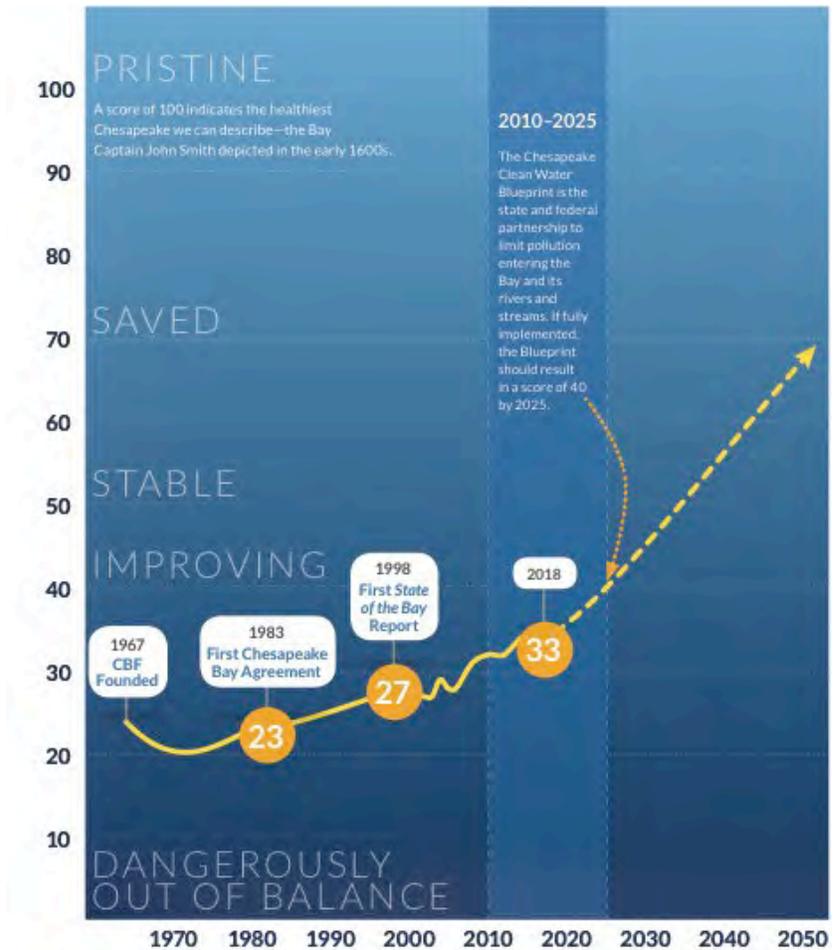
Programmatically, CBF will:

- **Educate** strategic and diverse stakeholders, opinion leaders, elected and appointed officials, school administrators, teachers, and students about the imperative of clean water. Education will serve as a means to student and citizen engagement and behavior change.
- **Advocate** for the defense and implementation of the Blueprint utilizing our team of scientists, lawyers, and policy experts. Engage decision makers, the general public, and CBF members in efforts to ensure that good laws and regulations are developed, introduced, passed, retained, and enforced.
- **Litigate** to ensure Blueprint implementation, and to expose and rectify the most egregious cases of non-compliance with environmental laws and regulations.
- **Diversify** our staff and Board to enhance our ability to save the Bay. Connect with and engage a broad spectrum of stakeholders. Consistent with our mission, incorporate concepts of diversity, equity, inclusion, and justice across all strategies.
- **Restore** natural filters to achieve demonstrable, specific, on-the-ground water quality improvements. When conducting restoration work on private land, CBF will make every effort to encourage the landowner to advocate for Blueprint implementation.
- **Innovate** new methods and programs for engaging citizens, reducing pollution, and fully achieving the Blueprint goals.

APPENDIX

CBF's Health Index

Since 1998, CBF has attempted to answer the question “How is the Bay doing?” by publishing an annual *State of the Bay* report. Now published biennially, this report examines the best available science about 13 indicators of Bay health in three categories: pollution, habitat, and fisheries. We measure the current state of the Bay against the healthiest Chesapeake we can describe—the Bay Captain John Smith depicted in the early 1600s, a theoretical score of 100. We say the Bay will be stable when its health index score is 50 and saved when it is 70.



Chesapeake Clean Water Blueprint

The Chesapeake Clean Water Blueprint comprises what is known legally as the Bay’s Total Maximum Daily Load (TMDL)—science-based, pollution-reduction targets—and Bay jurisdictions’ Watershed Implementation Plans (WIPs) to meet those targets by 2025.

Climate Change

The Chesapeake, America’s largest estuary, is a national treasure under severe stress from nitrogen, phosphorus, and sediment pollution. Unfortunately, global climate change is adding more stress to a system already dangerously out of balance. Mitigating climate change and implementing the Clean Water Blueprint are more than just two sides of a coin. We not only need both to save the Bay, but each reinforces and adds value to the other. One plus one can equal three.

CBF's Making History Campaign

The *Making History* campaign unites over 75 conservation partners to plant 10 billion oysters in the Bay and 10 million trees in Pennsylvania while activating 1 million voices in support of clean water. These partnerships will continue to grow in number and volume over the life of the campaign. As the partnership lead and coordinator, CBF is positioned to present a united front in Blueprint implementation to ensure its success. Additionally, *Making History* places a special emphasis on Pennsylvania to bolster the Commonwealth's pollution-reduction efforts. Ultimately, this campaign will use two of the Bay's most effective natural filters, oysters and trees, along with diverse and empowered voices of Bay stakeholders to ensure Blueprint goals are met by 2025.

Pollution Levels

Far too much nitrogen and phosphorus pollution enters local rivers, streams, and the Chesapeake Bay each year. Bay scientists estimate that the Bay can tolerate, on average, roughly 187 million pounds of nitrogen pollution and 12.5 million pounds of phosphorus pollution annually. In addition, scientists have established a sediment pollution maximum of about 6.5 billion pounds.

Between October 2015 and September 2016, approximately 241 million pounds of nitrogen, 13.6 million pounds of phosphorus, and 2.5 million tons of sediment reached the Chesapeake Bay. These load estimates are based primarily on monitoring data from the Bay's major rivers and wastewater treatment facilities.

Water Quality Standards

Clean water is essential for all Bay life. Nitrogen and phosphorus pollution are the Bay's largest problems, causing dead zones, algal blooms, and murky water. Bay scientists have set water quality standards that are required for a healthy Bay. CBF will measure against the following:

1. Dissolved Oxygen (DO)

Scientists generally agree that dissolved oxygen concentrations of 5.0 mg/L (milligrams per liter) or greater will allow the Chesapeake Bay's aquatic creatures to live and thrive. However, because oxygen requirements differ from species to species, the water quality standard for oxygen varies across the Bay.

In the deepest parts of the Bay, where worms and small clams live and where oxygen levels are naturally low, DO concentrations of at least 1 mg/L are required. Fish, crabs, and oysters that live or feed along the bottom require oxygen

concentrations of 3 mg/L and greater. Spawning migratory fish and their eggs and larvae need up to 6 mg/L during these sensitive life stages. In 2010 (the most recent year for which data are readily available), 38 percent of the Bay's waters met water quality standards for DO.

2. *Chlorophyll a*

Chlorophyll a is one way to measure algae in the Bay. High amounts of *Chlorophyll a* are an indication of nitrogen and phosphorus pollution, which fuels the growth of algae. Algal blooms block sunlight from reaching underwater grasses, which are an important habitat for fish, crabs, and other Bay life. When algae die, they decay in a process that depletes deeper waters of oxygen.

In those areas of the Bay where *Chlorophyll a* serves as an indicator of water quality, attainment of numeric standards between 10 and 23 micrograms per liter during spring and summer months must be met. In 2009, only 29 percent of the Bay met *Chlorophyll a* standards.

3. Water Clarity

Water clarity is the measure of the amount of sunlight that can penetrate through the water. It is the single most important factor determining the growth and survival of underwater grasses, which fish and crabs need for food and habitat. The restoration goal for underwater grasses is 185,000 acres. In 2010, there were 79,675 acres of grasses Bay-wide, or 43 percent of the goal.