

Making the Grade: The Chesapeake Bay Program's Bay Barometer

Chesapeake Bay
Commission Meeting
January 6, 2022

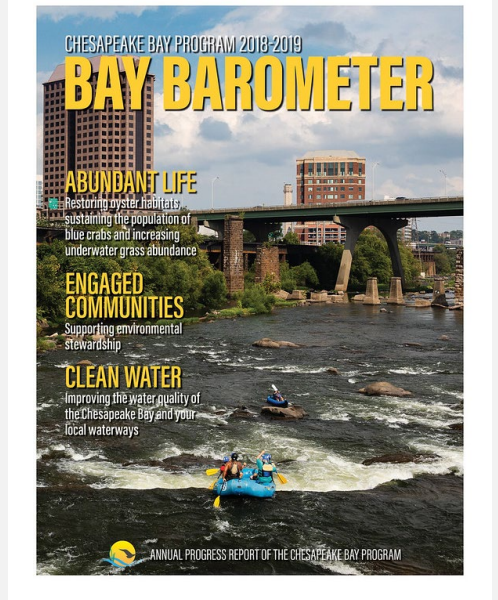


Chesapeake Bay Program

Science. Restoration. Partnership.

What is it?

- An annual report on watershed health and restoration.
- A summary of the most current information and data of the 31 outcomes of the *Chesapeake Bay Watershed Agreement*.





The Chesapeake Bay Program partners envision an environmentally and economically sustainable Chesapeake Bay watershed with clean water, abundant life, conserved lands and access to the water, a vibrant cultural heritage, and a diversity of engaged citizens and stakeholders.

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Chesapeake Bay Watershed Agreement

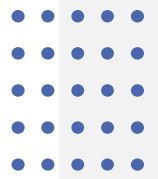
- Establishes the goals and outcomes for restoring the Chesapeake Bay, its tributaries and the lands that surround them.
- Guides the work of the Chesapeake Bay Program.
- Commits to strengthening the transparency of the partnership's actions to increase public confidence in its efforts.



ChesapeakeProgress

- Accurate, up-to-date and accessible information on indicators of environmental health, restoration and stewardship.
- Provides real-time data for each outcome as it is updated.
- www.chesapeakeprogress.com





Data and information

- 21 out of 31 outcomes have measurable targets that are referred to as “indicators”.
- Each of these indicators are updated on a different timeframe, depending on the availability the data source.
- All data reflects the health of the Bay and its watershed over the course of many years, and in some cases, decades.
- Data and information used to track progress comes from a range of sources including government agencies, academic institutions, NGOs and direct demographic and behavior surveys.



Design of the report

- Simple, short and streamlined.
- Refers to ChesapeakeProgress for more detailed information and data.
- Visual—pictures, charts and graphs meant to engage the interested public.
- Important to show the interconnectedness of the outcomes.
- No letter grade assigned; data should speak for itself.



Evolving report

- Audience has always been the interested public, teachers and students.
- More data and information made the report longer and more technical.
- Audience became more internal to the partnership.
- State of the Program Report for the Chesapeake Executive Council.



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Did you know?

The Chesapeake Bay

The Chesapeake Bay is the nation's largest estuary, part of an interconnected ecosystem that supports countless plants, animals and habitats. More than 64,000 square miles of land make up the Bay's "watershed," the area of land that eventually drains into the Bay.

Water Pollution

Too much nitrogen and phosphorus can fuel the growth of algae blooms that lead to low- or no-oxygen conditions harmful to underwater life. Excess sediment can suffocate shellfish and block sunlight from reaching aquatic plants.

Between October 2014 and September 2015, about 217 million pounds of nitrogen, 9.6 million pounds of phosphorus and 23 billion pounds of sediment entered the Bay: a 25 percent, 46 percent and 56 percent drop from the previous year, respectively.

Conserved Lands

Protecting land from development protects water quality, supports fish and wildlife, maintains working farms and forests, preserves our history and provides opportunities for outdoor recreation.

Since 2010, more than one million acres of land in the Chesapeake Bay watershed have been permanently protected from development, meeting 50 percent of the two million-acre goal.

Public Access

Public access to open space and waterways can improve public health and quality of life. Access to the water can also build personal connections with places that have shaped life in the region, boosting tourism and creating citizen stewards.

Between 2010 and 2015, 108 boat ramps, fishing piers and other public access sites were opened to the public, meeting 36 percent of the goal to add 300 new sites.

Want to learn more?
Visit www.chesapeakebay.net

2015-2016
BAY BAROMETER
Health and Restoration in the Chesapeake Bay Watershed

194 million
adult female blue crabs were in the Bay in 2016, meeting 90 percent of the target of 215 million female crabs.

92,315 acres
of underwater grasses were in the Bay in 2015, meeting 50 percent of the 185,000-acre goal.

7,623 acres
of wetlands were created or reestablished on farmland between 2010 and 2015, meeting 9 percent of the 83,000-acre goal.

Six
Bay tributaries have oyster restoration projects underway, with a goal to bring this number to 10.

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PROGRESS

Health and Restoration in Delaware (2017-2018)

More than 700 square miles of Delaware sit within the 64,000 square mile Chesapeake Bay watershed, and four of the state's major rivers—the Choptank, Nanticoke, Pocomoke and Sassafras—flow into the Bay. Delaware has committed to achieving 22 of the outcomes in the Chesapeake Bay Watershed Agreement. Its progress toward seven of these outcomes is highlighted here.

Protected Lands

According to preliminary data collected in 2018, more than 1.3 million acres of land in the watershed have been permanently protected from development since 2010. Of this total, almost 14,000 acres are in Delaware. This brings the total amount of protected land in the watershed portion of the state to 109,505 acres: one percent of all the protected land in the watershed.

Forest Buffers

Between 2010 and 2017, 45 miles of forest buffers were planted along rivers and streams in Delaware; during this time more than 2,050 miles of forest buffers were planted across all watershed jurisdictions.

Estimated Nitrogen, Phosphorus and Sediment Pollution Reduced

The Chesapeake Bay Program uses its Watershed Model to estimate reductions in nitrogen, phosphorus and sediment pollution that is flowing into the Bay. By the end of 2017, Delaware had achieved 32 percent of its 2025 targets for nitrogen and 100 percent for phosphorus and sediment. Collectively, Bay Program partners have achieved 36 percent of their nitrogen target, 87 percent of their phosphorus target and 67 percent of their sediment target.

Delaware's progress toward achieving its 2025 targets

32% nitrogen **100%** phosphorus **100%** sediment

The Chesapeake Bay Watershed

Chesapeake Bay Program
410 Severn Ave, Suite 109
Annapolis, MD 21403
(800) YOUR-BAY
CHESAPEAKEBAY.NET | CHESAPEAKEPROGRESS.COM

Reaching other audiences

Bay Barometer

An Annual Report on the State of the Program
and the Health of the Chesapeake Bay

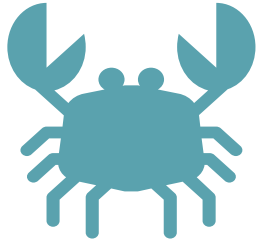
December 2021

2020-21 Bay Barometer

- Updated data for eight outcomes.
- Partnership updates covering DEIJ, stewardship, education, agriculture, grant funding, monitoring activities and many others.
- Serves a dual role as the 2021 State of the Program report.
- Provides an update on the attainability of each outcome to meet its 2025 target.
- Social media plan in development to communicate to a broader audience.



Quick snapshot of 2020-21 Bay Barometer



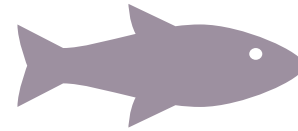
Outcome Attainability

Two outcomes are considered to have met their targets (2017 Watershed Implementation Plans and Blue Crab Management).

Twelve outcomes are fully on track to meet their targets by 2025.

Eleven outcomes are off track in meeting their targets by 2025.

Six outcomes are uncertain in their progress toward meeting their targets by 2025.



Updated outcomes in 2021

2025 Watershed Implementation Plans

Blue Crab Abundance

Blue Crab Management

Oysters

Public Access Site Development

Submerged Aquatic Vegetation (SAV)

Sustainable Schools

Water Quality Standards Attainment and Monitoring



Questions?

Rachel Felver

Chesapeake Bay Program Communications
Director

Alliance for the Chesapeake Bay

rfelver@chesapeakebay.net

(443) 892-0205