

FACT SHEET

Chesapeake Bay

Overview

The Chesapeake Bay is the largest estuary (area where freshwater and ocean saltwater mixes) in the United States, and its watershed includes parts of 6 states: Virginia, Maryland, West Virginia, Delaware, Pennsylvania, New York) and Washington, D.C. The Commonwealth of Virginia helps protect and restore the Bay by participating in the Chesapeake Bay Program and enforcing the Chesapeake Bay Preservation Act.

What are some interesting facts about the Chesapeake Bay?

- Formed 10,000 years ago
- 64,000 square miles of watershed, 200 miles long, holds more than 18 trillion gallons of water
- Ranges from 3.4 miles wide to 35 miles wide; on average, its depth is 21 feet deep
- Over 18 million people live within the watershed
- Indigenous, colonial, and Black histories
 - More than 200 historic shipwrecks
 - “Chesepiooc” is an indigenous Algonquian word meaning village “at a big river”
- Warm, shallow water – a mix of fresh water and ocean saltwater
 - End point for 150+ rivers and streams
 - Ecosystem of over 3,600 plants and animals, including 348 finfish and 173 shellfish
 - Produces about 500 million pounds of seafood (annually?)
 - Known for oysters, blue crabs, clams, rockfish/striped bass, shad, and flounder
 - Saltiest part of the Bay is where the Bay meets the Atlantic Ocean
- Major shipping port
- Recreation and tourism
 - Kayaking/boating/sailing, fishing/crabbing
 - 1,300 public access sites
- 70 acres of forest lost in the watershed each day
- Land-to-water ratio within the watershed is 14:1: the largest of any coastal water body in the world



What prompted the need to restore the Bay?

In the 1970s, the Bay had the world’s first marine dead zone, where low oxygen levels caused large fish kills. This was caused by increased algae called algal blooms, which were fueled by excess nitrogen and phosphorus from farm runoff, urban runoff, and sewage overflows. In response, Congress directed the EPA to study the Bay’s environmental issues. In the ‘80s, there were concerns of oyster populations dramatically decreasing. Overharvesting and a rapid increase of the nearby human population caused an increase in pollution, creating a difficult environment for oysters to be close together to reproduce.



How does DEQ and EPA protect and restore the Bay?

The Federal Chesapeake Bay Program is a regional partnership of 6 neighboring states and D.C. that conduct Bay restoration efforts.

- In 1983, governors of Maryland, Virginia, and Pennsylvania; the mayor of the District of Columbia; the EPA Administrator; and Chesapeake Bay Commission chair signed the Chesapeake Bay Agreement of 1983 that

committed to working together on Chesapeake Bay restoration. New agreements were signed in 1987, 1992, 2000, and 2014.

- The full Chesapeake Bay partnership is composed of federal and state agencies, non-profit organizations, and academic institutions managed by EPA that provides technical and financial assistance to states, local governments, non-governmental organizations, and academic institutions
- The 2014 Agreement's 10 goals and 31 expected outcomes have a 2025 deadline, 18/31 outcomes will likely be achieved by the end of 2025, while the other 13 will not meet the expected timeline.
- Work is underway to amend the existing Agreement by the end of 2025 and restructure the Bay partnership by June 2026
- **Chesapeake Bay Program draft 2025 goals will be open for 60-day public feedback period July 2025 through August 2025**

The Virginia Chesapeake Bay Preservation Act was enacted within 84 jurisdictions generally located east of I-95 by the Virginia General Assembly in 1988. In the past 36 years, the Bay Act has become a critical element of Virginia's nonpoint pollution source management program to comprehensively address the effects of land use planning and development on water quality.

- Under the Bay Act and Regulations, DEQ's primary role is to provide local program oversight, policy guidance, and technical assistance when requested or otherwise required
- With DEQ's guidance, localities have designated Resource Protection Areas (RPA) to protect the most vulnerable environmental features (tidal wetlands and shores, non-tidal wetlands connected and contiguous to perennial water bodies, and a 100-foot vegetated buffer), and Resource Management Areas (RMA) located adjacent to the RPA. Within the RPA, land uses and activities are limited and discouraged. Within the RMA any uses or activities allowed by zoning are permitted.
- Performance criteria that protect water quality are required during the project planning process such as site-specific determination of RPA features, submission of a water quality impact assessment that specifies mitigation for encroachment into the RPA, preservation of existing vegetation, minimization of land disturbance and impervious surfaces, compliance with stormwater and erosion and sediment control requirements at a reduced threshold within the RPA and RMA, etc.
- State agencies are required to be consistent with local comprehensive plans and ordinances adopted to comply with local Bay Act requirements

What other environmental initiatives protect the Bay?

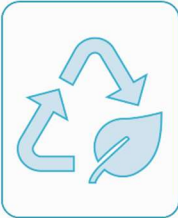





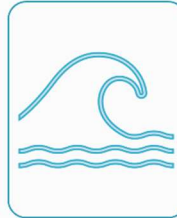
Chesapeake Bay Total Maximum Daily Load (TMDL)

- In 2010, the EPA established the largest ever "pollution diet" known as the Chesapeake Bay Total Maximum Daily Load (TMDL). A TMDL is a planning tool that provides the calculation of the maximum amount of particular pollutants that a body of water can receive and still meet applicable water quality standards.
- Uses an accountability framework that includes Watershed Implementation Plans (WIPs), locality two-year milestones, EPA's tracking and assessment of restoration progress, and specific federal contingency actions if jurisdictions do not meet their commitments
- When the TMDL was established, monitoring data continued to show that the Bay had poor water quality, degraded habitats, and low populations of many species of fish and shellfish. The TMDL set Bay watershed limits for nitrogen, phosphorus, and sediment per year.

Watershed Implementation Plans (WIPs)

- WIPs are roadmaps for how Chesapeake Bay states and the District of Columbia, in partnership with federal and local governments, will each attain the Chesapeake Bay TMDL pollution limits through their pollution reduction goals. Each jurisdiction is also required to submit [2-year milestones](#) based on their progress.
- Virginia's Phase III Watershed Implementation Plan (WIP III) was completed in August 2019 to achieve nutrient and sediment reductions needed to restore the Chesapeake Bay and its tidal tributaries through best management practices, along with programmatic actions, necessary to achieve state basin planning targets for nitrogen and phosphorus.

What can I do to protect the Chesapeake Bay?

						
Environmental stewardship	Learn more about your watershed & the Bay	Support restoration & education activities	Reduce impervious surfaces	Volunteer / get involved	Conserve lands	Clean Water Cost-Share



CHESAPEAKE BAY

6/10/2025

Handout:

Acronyms, Definitions, and Resource Links

Bay – Chesapeake Bay. The largest estuary (waterbody where the tide meets the stream) in the United States.

Bay Act – Chesapeake Bay Preservation Act. Legislation enacted by the Virginia General Assembly in 1988 as an important part of Virginia’s nonpoint pollution source management program. Its purpose is to protect and improve water quality in the Chesapeake Bay by requiring implementation of effective land use management practices.

BMPs – Best Management Practices. In this context, these are used to reduce nitrogen, phosphorus and sediment loads to the Chesapeake Bay and improve local water quality.

CBP – Chesapeake Bay Program. A regional partnership that has directed and organized Chesapeake Bay restoration since 1983, consisting of the seven Bay jurisdictions, EPA, and the Chesapeake Bay Commission.

CBPA - Chesapeake Bay Preservation Act aka “Bay Act”

CBPO – Chesapeake Bay Program Office – The EPA Office in Annapolis, Maryland coordinates the program and is supported by federal, state, academic, and non-governmental partners. EPA’s role includes funding, scientific research, and coordination.

CZM – Coastal Zone Management. A network of state agencies and local governments that administer enforceable laws and regulations that protect our wetlands, dunes, subaqueous lands, fisheries, and air and water quality – within the Virginia “Coastal Zone.” The Coastal Zone includes all of Virginia’s Atlantic coast watershed, parts of the Chesapeake Bay and Albemarle - Pamlico Sound watersheds and the waters within and out to the three-mile Territorial Sea boundary.

DEQ – Virginia Department of Environmental Quality
[Virginia DEQ | Home](http://www.deq.virginia.gov) www.deq.virginia.gov

EPA – United States Environmental Protection Agency
[U.S. Environmental Protection Agency | US EPA](http://www.epa.gov) www.epa.gov

TMDLs – Total Maximum Daily Load. Total Maximum Daily Load is the maximum amount of certain pollutants a waterbody can receive while still meeting water quality standards. These are often referred to as a pollution diet. When establishing a TMDL, the goal is to improve water quality in impaired water bodies while ensuring healthy ecosystems.

WIPs – Watershed Implementation Plans. Roadmaps for how Chesapeake Bay states and the District of Columbia, in partnership with federal and local governments, will attain the Bay TMDL (pollution diet).

Virginia Chesapeake Bay Laws

- **Chesapeake Bay Preservation Act:**
[Chesapeake Bay Preservation Act | Virginia DEQ](#)
[Code of Virginia Code - Article 2.5. Chesapeake Bay Preservation Act](#)

Resources

- **Beyond 2025 Report**
[A Critical Path Forward for the Chesapeake Bay Program Beyond 2025](#)
- **Chesapeake Bay Commission:**
chesbay.us
- **Chesapeake Bay Program (CBP); Chesapeake Bay Program Office (CBPO):**
[Chesapeake Bay Program - Science, Restoration, Partnership](#)
[About the Chesapeake Bay Program Office | US EPA](#)
- **Chesapeake Bay Total Maximum Daily Load (TMDL):**
[Chesapeake Bay Total Maximum Daily Load \(TMDL\) | US EPA](#)
[Chesapeake Bay TMDL Document | US EPA](#)
- **Chesapeake Bay Watershed Agreement:**
[Chesapeake Bay Watershed Agreement signed](#)
- **Virginia's Chesapeake Bay 2024-2025 Programmatic Milestones Progress Report**
[Chesapeake Bay Nutrient & Sediment Reduction Milestones | Virginia DEQ](#)