

Health and Restoration in Delaware

More than 700 square miles of Delaware sit within the Chesapeake Bay watershed, and four of the state's major rivers—the Choptank, Nanticoke, Pocomoke and Sassafras—flow into the Chesapeake Bay. The following outcomes of the [Chesapeake Bay Watershed Agreement](#) were updated in 2023 and the Chesapeake Bay Program is pleased to present specific data for Delaware.

Forest Buffers

Outcome: Increase the capacity of [forest buffers](#) to provide water quality and habitat benefits throughout the Chesapeake Bay watershed. Restore 900 miles of riparian forest buffers per year and conserve existing buffers until at least 70 percent of the watershed's riparian areas are forested.

Progress in Delaware: Delaware planted 0 miles of forest buffers within the watershed in 2021. The state last planted 11.5 miles in 2013.

Tree Canopy

Outcome: Continually increase urban [tree canopy](#) capacity to provide air quality, water quality and habitat benefits throughout the watershed. Expand urban tree canopy by 2,400 acres by 2025.

Progress in Delaware: Delaware reported roughly 14 acres of community tree plantings in 2021, but lost 28 acres of tree canopy between 2013/14 and 2017/18. [Click here](#) to see tree canopy gain/loss for individual Delaware counties.

2025 Watershed Implementation Plans

Outcome: By 2025, have all [practices and controls](#) in place to achieve applicable water quality (i.e., dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll a) standards as articulated in the Chesapeake Bay Total Maximum Daily Load.

Progress in Delaware Delaware has best management practices (BMPs) in place to achieve 29% of its pollutant reduction goal for nitrogen, 31% of its reduction goal for phosphorus and 73% of its reduction goal for sediment by 2025. BMPS put in place from 2021 to 2022 in Delaware are estimated to have lowered the amount of nitrogen and sediment flowing into the Bay by 3.3% and 6.9%, respectively. The state increased the amount of phosphorus flowing into the Bay by 4.1%. In 2022, Delaware released 6.2 million pounds of nitrogen, .1 million pounds of phosphorus and 33.1 million pounds of sediment into the Bay.

Delaware's Progress Towards Meeting its 2025 Targets

29%

Nitrogen

31%

Phosphorus

73%

Sediment

Toxic Contaminants

Outcome: Continually improve practices and controls that reduce and prevent the effects of [toxic contaminants](#) below levels that harm aquatic systems and humans. Build on existing programs to reduce the amount and effects of polychlorinated biphenyls (PCBs) in the Bay and watershed. Use research findings to evaluate the implementation of additional policies, programs and practices for other contaminants that need to be further reduced or eliminated.

Progress in Delaware 1.1% of Delaware's portion of the Chesapeake Bay's tidal waters was considered to be impaired by toxic contaminants in 2020. Seventy-eight percent of the entire Bay was considered to be impaired in 2020, a decrease from 83% in 2018.

Land Use Methods and Metrics

Outcome: Continually improve our knowledge of [land conversion](#) and the associated impacts throughout the watershed.

Progress in Delaware: 84.8% of Delaware's land is covered by 5% or less impervious surfaces, 12.7% is covered by 5-10% impervious, 2.3% is covered by 10-25% impervious and .2% is covered by over 25%. In Delaware, areas with greater than 10-25% impervious surface cover grew by .22% between 2013/2014-2017/2018.

Protected Lands

Outcome: By 2025, [protect an additional two million acres of lands](#) throughout the watershed—currently identified as high-conservation priorities at the federal, state or local level—including 225,000 acres of wetlands and 695,000 acres of forestland of highest value for maintaining water quality.

Progress in Delaware: According to data collected through 2022, nearly 1.64 million acres of land in the Chesapeake Bay watershed have been permanently protected since 2010. Within the watershed, Delaware has about 126,178 acres of protected lands total as of 2022.

Public Access

Outcome: By 2025, add 300 new [public access](#) sites to the Chesapeake Bay watershed, with a strong emphasis on providing opportunities for boating, swimming and fishing, where feasible.

Progress in Delaware Between 2011 and 2022, 284 boat ramps, fishing piers and other public access sites were opened on and around the Chesapeake Bay. Delaware has opened two of these sites.

Environmental Literacy Planning

Outcome: Each participating Chesapeake Bay jurisdiction should develop a comprehensive and systemic approach to [environmental literacy](#) for all students in the region that includes policies, practices and voluntary metrics that support the environmental literacy goals and outcomes of the Watershed Agreement.

Progress in Delaware: In 2022, 16 local education agencies (LEAs) from Delaware responded to the Chesapeake Bay Program's Environmental Literacy Indicator Tool (ELIT) that measures the degree of environmental literacy preparedness among school districts across the watershed. Of the LEAs that responded to the survey, 6% reported being well-prepared, 38% reported being somewhat prepared, 38% reported being not prepared and 19% did not report a status.

Student

Outcome: Increase [students'](#) age-appropriate understanding of the watershed through participation in teacher-supported Meaningful Watershed Educational Experiences (MWEEs) and rigorous, inquiry-based instruction, with a target of at least one MWEE in elementary, middle and high school depending on available resources.

Progress in Delaware: ELIT survey responses captured the extent to which Meaningful Watershed Educational Experiences (MWEEs) were available at schools. In Delaware, 50% of LEAs reported offering no MWEEs, 42% reported offering some MWEEs and 8% reported offering system-wide MWEEs in at least one grade level.

Climate Monitoring and Assessment

Outcome: Continually [monitor and assess](#) the trends and likely impacts of changing climatic and sea level conditions on the Chesapeake Bay ecosystem, including the effectiveness of restoration and protection policies, programs and projects.

Progress in Delaware: For Delaware, when compared to a 100-year baseline (1901-2000), total annual precipitation in 2021 increased in northeastern and southeastern climate divisions by 7.0% and 6.5%, respectively. Compared to a 100-year baseline (1901-2000) average air temperature also increased in northeastern and southeastern divisions by 2.7°F and 2.8°F per century, respectively.

Bay-Wide Outcomes

In addition to the above, the following outcomes were updated in 2023 and their Bay-wide data and information can be found on ChesapeakeProgress.com:

- [Blue Crab Abundance](#)
- [Oysters](#)
- [Submerged Aquatic Vegetation](#)
- [Wetlands](#)
- [Stream Health](#)
- [Water Quality Standards and Attainment](#)
- [Local Leadership](#)
- [Diversity](#)