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The State of Chesapeake Bay and its Watershed in 2020.

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Abstract

Chesapeake Bay is the largest enclosed coastal sea in the United States. Located on the East Coast of North America, the Bay watershed covers 166,000 km², including parts of 6 U.S. states and Washington, D.C. (the District of Columbia). The ecosystem of Chesapeake Bay is severely stressed by the impacts of population growth and development, resulting in a large “dead zone” where dissolved oxygen levels are too low to support healthy fish and shellfish populations. Since 1983, the States of Maryland, Virginia, Pennsylvania, the District of Columbia and the federal government have spent billions of dollars on a comprehensive, integrated Bay and watershed restoration effort to protect and restore living resources, vital habitats, and water quality, promote and achieve sound land use and good citizen stewardship. These efforts have encompassed forest and wetland protection and restoration, agricultural nutrient management and land management improvements, waste water treatment plant upgrades, urban/suburban stormwater management, air pollution emission reduction, citizen education and other measures that have resulted in reversal of decades of degradation and some improvement in the health of Chesapeake Bay, but that improvement has been slowed by continued population growth and development in the watershed. Sea level rise, increasing temperatures and changing rainfall distribution and increasing rainfall intensity in the watershed resulting from global climate change are adding to these challenges. Following an extensive 2-year reevaluation of their efforts in 2017, the Bay jurisdictions announced new targets and developed enhanced restoration plans in early 2019. These new plans are now being implemented to increase ongoing efforts in all sectors, agriculture, urban runoff, wastewater treatment, Bay and watershed habitat restoration and species management, and adapt those efforts to address climate change impacts. This presentation will document results of these unprecedented actions in one of world's longest-running integrated coastal watershed restoration and protection efforts.

Keywords

Chesapeake Bay, Coastal Watershed, Ecosystem Restoration, Pollution control