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Rehabilitation of damaged ecosystems

Restoration Of Chesapeake Bay: Past Success And Future Challenges

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The Chesapeake Bay is the largest enclosed coastal sea in the United States. Located on the East Coast of North America, the Bay watershed covers 64,000 square miles and parts of 6 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. Following a 5-year federally funded scientific study of the causes of the observed decline in the health of Chesapeake Bay, in 1983, the States of Maryland, Virginia, Pennsylvania, the District of Columbia and the federal government, represented by the U.S. Environmental Protection Agency (EPA) signed the first Chesapeake Bay Agreement. That agreement has led to the development of a comprehensive, integrated restoration effort to protect and restore living resources, vital habitats, and water quality, promote and achieve sound land use and good citizen stewardship. Together the federal and state governments have spent billions of dollars on water quality protection and restoration, including 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 and other measures. This has resulted in some improvement in the health of Chesapeake Bay, but that improvement has been slowed by continued population growth and development in the watershed. In response to growing public concerns regarding delayed progress on restoration, in May, 2009 the Chesapeake Bay Executive Council (governors of all watershed States, Mayor of the District of Columbia, Administrator of U.S. Environmental Protection Agency (EPA) and Chair of the Chesapeake Bay Commission) committed to accelerate the rate of progress on the restoration efforts and established aggressive 2-year milestones to measure progress and hold governments, businesses and citizens accountable for meeting restoration goals. In 2010, the EPA published the first watershed-wide Total Maximum Daily Load (TMDL) limits for all pollutant sources in the watershed and in 2012, the watershed States and the District of Columbia published Watershed Implementation Plans designed to achieve the TMDL and established 2-year milestones for all sectors of the restoration effort (agriculture, wastewater, urban/suburban runoff, forest, riparian and wetland preservation/restoration, air pollution control). The State of Maryland has initiated its watershed restoration plan and is currently working with farmers, local governments, businesses and citizens to identify and implement the most cost-effective measures to

control nutrient and sediment pollution to meet the milestone goals and the ultimate water quality restoration goals. Progress is tracked and reported at monthly meetings with the Governor and his Bay Cabinet members (www.baystat.maryland.gov). This paper will discuss how this multi-jurisdictional, multi-sector effort has resulted in improvements in water quality and ecosystem health, the acceleration of progress and has generated a great deal of interest and action, both for, and against, restoration efforts, on the part of citizens, businesses and local governments.