SUCCESSES, CHALLENGES, AND LESSONS LEARNED IN THE RESTORATION OF THE CHESAPEAKE BAY

DAVID A. NEMAZIE¹ AND DR. ROBERT SUMMERS²

¹University of Maryland Center for Environmental Science, P.O. Box 775, Cambridge, MD 21613 U.S.A.

²Maryland Department of Environment, 1800 Washington Boulevard, Baltimore, MD 21230 U.S.A.

The restoration of the Chesapeake Bay has been the focus of the Chesapeake Bay Program (CBP) since its inception in 1983. The Chesapeake Bay is the largest estuary in the United States and one of the largest in the world. Its watershed is over 100,000 km^2 and is within the borders of 6 States and the District of Columbia. The CBP, through consensus of its members (Virginia, Maryland, Pennsylvania, DC, US EPA, and the Chesapeake Bay Commission), sets concise long term restoration goals, monitors progress, and assesses implementation rates. CBP goals have included a 40% reduction of nutrients (nitrogen and phosphorous), the implementation of tributary strategies, and more recently the removal of the Bay from the list of impaired waters by the year 2010. Many nutrient reduction strategies have been implemented such as a phosphorous detergent ban, the use of biological nutrient removal from wastewater treatment plants, agricultural best management practices, and grass and forested buffers. In addition, the key habitat restoration projects have been implemented to enhance oyster reefs, submerged aquatic vegetation beds, riparian forests and wetlands. Yet the health of the Bay has not vastly improved over the past 20 years. Many challenges still exist particularly the reduction of non-point source pollution from agricultural lands, extensive land conversion to accommodate population growth outside of the cities, and suppressed fishery populations. Based on various growth and best management practice scenarios the CBP Scientific and Technical Committee produced a report entitled "Chesapeake Futures" which estimates the level of implementation required to improve the health of the Chesapeake Bay. This report is being used to help guide future restoration needs.