STATEMENT OF PETER J. MARX
CHESAPEAKE BAY PROGRAM OFFICE
U.S. ENVIRONMENTAL PROTECTION AGENCY
FOR THE
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Thank you, Mr. Chairman.

Everyone here today knows what a national treasure the Chesapeake Bay is. Whether it's from our own personal experiences sailing, boating or fishing on the Bay, or from our knowledge that America's largest estuary is an incredibly productive natural resource and economic engine for the region. In a good year the Chesapeake produces half the blue crabs in America and provides the critical spawning grounds for 85% of the Atlantic Coast striped bass population. The Bay is also the lifeline for dozens of species from shad and herring to some of the largest concentrations of nesting osprey and blue herons. And the Chesapeake Bay has served for centuries as a commercial shipping center with two major port complexes -- Baltimore and Norfolk as well as supporting a multi-billion dollar boating and recreation industry.

The 64,000 square mile Chesapeake basin extends from Cooperstown, New York to the far reaches of the James River deep into the Blue Ridge Mountains of Virginia. Due to its shallowness (averaging only 21 feet deep) and its incredibly high ratio of land area to water volume (ten times more than the next closest estuary on earth, which is the Gulf of Finland), it is highly sensitive to what we are doing on the land. Those lands drain into 111,000 miles of creeks, streams and rivers that deliver their waters to tidewater and the Chesapeake. Our sustenance, our respite and our quality of life are all tied to this system we call the Chesapeake watershed.

The Chesapeake Bay is the largest, most productive estuarine system in the United States (and the second largest in the world). The watershed is over 64,000 square miles, and covers portions of six states (New York, Pennsylvania, Maryland, Virginia, West Virginia and Delaware) and the District of Columbia.

The effort to restore and preserve the Chesapeake has provided

lesson after lesson to the rest of the nation and to the world. The Chesapeake Bay Program began the massive restoration project in 1983, with the signing of the first Chesapeake Bay Agreement. Congress, building on the successful model established for the Chesapeake, set up the National Estuary Program in 1987. There are now 28 estuaries in the National Estuary Program throughout the U.S., emulating the efforts begun in the Chesapeake. The efforts to restore the Chesapeake have revolved around innovative ideas and actions that always seem to set examples for the rest of the nation. From a focus on nutrient pollution from the Bay Program's inception in 1983, to bans on TBT boat paint and phosphate detergents in the mid 1980's, to having to deal with poultry waste and pfiesteria in the 1990's to the challenge of sprawl and development in this decade.

The Chesapeake Bay Program, which has been leading the restoration of the Bay for nearly 20 years, has as its core partners the states of Maryland, Pennsylvania and Virginia, the District of Columbia, the Chesapeake Bay Commission (comprising state legislators from the three partner states) and the U.S. Environmental Protection Agency representing the Federal government. This effort is led by the Chesapeake Executive Council, which meets annually, and consists of six members the governors of three states, the mayor of the District of Columbia, the chair of the Chesapeake Bay Commission and the administrator of EPA. There are scores of other partners, both public and private, who participate in various aspects of the restoration effort, and many are added every year.

The Chesapeake Bay Program has been a pioneer in setting clear and measurable restoration goals that the public can relate to. In 1987 the Chesapeake Executive Council signed a second Chesapeake Bay Agreement, and its centerpiece was a goal to reduce nutrients entering the Bay by 40% by 2000. The Chesapeake Bay Program adopted dozens of goals through the 1990s, with specific measures of progress, such as restoring over one hundred thousand (114,000 by 2005) acres of underwater grassbeds, opening over a thousand miles of rivers (1,356 miles by 2003) for fish passage, and restoring thousands of miles (2,010 miles by 2010) of forest buffers along streams. In each case, the measures are numerical and include a timeframe for achievement. Restoration efforts all over America have drawn from these examples and are setting their own measurable goals and dates. The Bay Program was a pilot for the Federal Government Performance and Results Act, and has helped frame the government-wide effort.

The Chesapeake Bay Program has developed an extensive, multi-faceted sets of environmental indicators to clearly illustrate the goals that have been set, and the progress being made toward meeting them. The sets of these indicators (slides, overheads, powerpoint presentations, etc.) are tailored specifically to various audiences, running the gamut from a symposium of Bay scientists to the monthly meeting of a local Kiwanis club.

The Chesapeake Bay Program has also been a leader in data management, a crucial component in ensuring that the research, computer model outputs and the presentation of information through environmental indicators is consistent, accurate and the most up-to-date possible. The Chesapeake Information Management System requires various Federal and state agencies, and others involved with data within the Program to sign Memoranda of Agreements ensuring consistent data management and quality assurance and control safeguards. This data is also used in the Bay Program's Watershed Profiles, which enables various users to obtain extensive and varied amounts of spatial data specific to the various subwatersheds throughout the Chesapeake region. This information can be obtained through the Chesapeake Bay Program website at: chesapeakebay.net

There are many other examples of Chesapeake watershed leadership. Among the more notable achievements are the Local Government Participation Action Plan, which recognized that the Federal and state governments could not achieve our goals alone; the Community Watershed Initiative, which broadened the effort to include citizen groups; and the Chesapeake Bay Small Watershed Grant Program, which under the leadership of the region's Congressional delegation has evolved into a comprehensive multi-agency funding catalyst to provide support for on-the-ground results at the local level. In partnership with the National Fish and Wildlife Foundation, funds from EPA, NOAA, the U.S. Forest Service and private foundations have been combined to make well over $2 million available to local governments and community watershed groups in Fiscal Year 2002. These funds, in grant amounts from $5,000 to $50,000 are to be used for on-the-ground restoration and stewardship activities. The National Park Service has also developed a similar program providing grants and technical assistance to establish a Network of Gateway sites and Water Trails throughout the Bay watershed.

Another unique aspect of the Chesapeake Bay Program partnership

is the way the Federal agencies have come together to support the cooperative efforts with the states and others in the Program. As some of the Commission members found out on Monday when they visited the EPA Chesapeake Bay Program Office in Annapolis, there are more than just EPA employees in that office. There you will find employees of EPA, but also 13 other Federal employees from the U.S. Forest Service, the National Park Service, Natural Resources Conservation Service, U.S. Fish and Wildlife Service, U.S.Geological Survey, combined with the NOAA Chesapeake Bay Office that is co-located with EPA. These Federal employees work together and with dozens of state, regional, university and private non-profit employees who are also located at the Chesapeake Bay Program Office as a single team. It is a remarkable example of intergovernmental cooperation. And it produces results.

Federal agencies have been involved in the Bay Program since its inception, but they play much more of a support role than as a lead within the Program's infrastructure. Only one of the six members of the Chesapeake Executive Council represents the Federal government. And all eight of the key programmatic subcommittees within the Bay Program are chaired by state representatives. But there is a Federal Agencies Committee within the Bay Program structure that is set up to provide advice, assistance and access to approximately 20 different Federal agencies. This group has also sought to operate by the tenets of the Bay Program and in 1994 and 1998 brought their agency and department leaders together to commit to a series of measurable goals for the Federal government. The 1998 *Federal Agencies Chesapeake Ecosystem Unified Plan (FACEUP)* focused on 50 specific commitments targeting the 2.5 million acres of Federally owned lands within the Bay watershed, as well as the expertise that some agencies could bring to the greater Bay Program effort. Each commitment had a lead Federal agency to manage its implementation. These commitments ranged from developing a list of priority habitat restoration project on Federal lands, and completing at least two of those projects annually (with NOAA as the lead Federal agency) to the development of model lease provisions for Federal facilities within the Bay watershed (with the General Services Administration as the lead agency) to identification septic system problems on Federal lands and development management plans for their improvement (U.S. Postal Service lead) and to increase public access to the Bay, with at least 200 additional miles of Federally-owned shoreline opened or enhanced for public access by 2005 (with the National Park

Service as the lead agency).

The partnerships and history of the Chesapeake Bay Program led the Chesapeake Executive Council, at its annual meeting in 1998, to commit to develop a comprehensive new agreement -- the first since 1987. Many of the Program's goals were keyed to the year 2000 and as those deadlines approached the new agreement would be created with a series of goals and commitments to take the Bay restoration into the 21st Century. After more than a year and a half in the making, the Chesapeake Bay Program partners came together on the shores of the Bay on June 28th, 2000, to sign the historic new agreement. The *Chesapeake 2000* agreement laid the foundation and set the course for the Bay's restoration and protection for the next decade and beyond.

The Chesapeake Bay Program continued its traditional method of getting all stakeholders to the table to be part of the policy-making process. The open public process attempts to get everyone with a vested interest to the table and generally solicits the greatest diversity of views. The *Chesapeake 2000* process is a classic example of the Bay Program way. Begun a full year and a half before the agreement was signed, the process was long and involved, but ultimately inclusive and productive. The private non-profit Alliance for the Chesapeake Bay began a public outreach in the spring of 1999 to determine what the public wanted addressed in a new Chesapeake Bay agreement. The Alliance's three-pronged Chesapeake Renewal Project included interviews with stakeholders, holding focus groups, and analyzing nearly a thousand questionnaires filled out by people throughout the Bay watershed.

Many of the results of the Chesapeake Renewal Project were reflected in the draft *Chesapeake 2000* agreement that was released in December 1999. A notice was put in the Federal Register and the draft agreement was open for comment through March 31, 2000. Approximately 1,000 detailed public comments were received and synthesized. <u>All</u> of those comments were looked at and considered in the final development of the agreement. By all accounts the final agreement was strengthened considerably by the Program's solicitation, review and response to the many comments. There was a considerable amount of negotiations that went on for a period of several months but the final agreement contained a number of far-reaching and innovative provisions.

The *Chesapeake 2000* agreement focuses on five broad areas, and it

is within these parameters that the Bay Program is concentrating all of its efforts. The five areas are: 1) living resource protection and restoration; 2) vital habitat protection and restoration; 3) water quality protection and restoration; 4) sound land use; and 5) stewardship and community engagement. *Chesapeake 2000* contains a number of bold and groundbreaking goals, such as:

*** Oysters/Crabs Continuing the Bay Program's long history of dealing with the restoration of the Bay's living resources and setting numerical goals, the new agreement commits to a tenfold increase in native oysters by 2010, and the setting of new Baywide harvest targets for blue crabs in 2001 -- which was accomplished Maryland and Virginia.**
*** Sprawl and Growth Commitments The sprawl and livability issues that have become a national issue are addressed in with specific numerical goals and a timetable. The states have agreed to reduce the rate of harmful sprawl development of forests and farms by 30% by 2012 and to permanently preserve 20% of the Bay watershed by 2010 (approximately 17% is currently preserved).**

*** Mixing Zone Elimination The Great Lakes states were the first to agree to a phase out of mixing zones for bioaccumulative chemicals. The *Chesapeake 2000* agreement commits to a voluntary elimination of mixing zones for both bioaccumulative and persistent chemicals by 2010. The "persistent chemical" inclusion will include metals such as copper, cadmium, arsenic, chromium and lead that would not be included in a "bioaccumulative only" phase out. The agreement also commits to "...strive for zero release of chemical contaminants from point sources, including air sources."**

*** Wetlands Commits to a no net loss of existing wetlands, a net gain of 25,000 acres by 2010 and a commitment to develop and implement locally-generated wetlands preservation plans on 25% of the land area of the Chesapeake Bay watershed by 2010.**

*** Government by Example/Stormwater Management Under the Government by Example subsection of the agreement the Program agreed to develop an Executive Council Directive by 2001 to address stormwater management to control nutrient, sediment and chemical contaminant runoff from state, Federal and District owned land. The Executive Council issued their new Directive at their annual meeting last month in the District of Columbia.**

*** Education and Public Access** **The agreement also addresses people. There is a commitment to provide every school student in the Bay watershed with an outdoor Bay or stream experience by the time they graduate from high school beginning with the class of 2005. There are also goals for increasing public access to the Bay and its tributaries (30% increase in public access points by 2010) and an increase in water trails by 500 miles by 2005.**

One of the most far reaching and innovative parts of the *Chesapeake 2000* agreement is the area on "Water Quality Protection and Restoration" which commits to, "By 2010, correct the nutrient- and sediment-related problems in the Chesapeake Bay and its tidal tributaries sufficiently to remove the Bay and the tidal portions of its tributaries from the list of impaired waters under the Clean Water Act." This commitment goes further than we have ever gone before and it has once again raised the bar for the Bay Program. This not only commits to rectify nutrient problems, but also all sediment-related problems to the point where there is no adverse impact on the Bay's living resources and on human health. The Bay Program has learned that we did not reach our 40% nutrient reduction goals by 2000. From the Potomac River north, in the areas of the Bay where the tributaries have the greatest impact on the Bay itself, we made great strides, meeting our phosphorus reduction goal but falling short of the nitrogen reduction goal by a few million pounds. In the rest of the watershed we still reduced the annual nitrogen loading to the Bay by 48 million pounds but there was still much more to do. We made great progress, especially in the face of rising population and tremendous development pressures, but with the new goals we must redouble our efforts.

The reality of the magnitude of the job required us to engage what we call the "non-signatory states" in helping to achieve these goals. The non-signatory states, those that are in the Bay watershed but have not signed the *Chesapeake Bay Agreement* -- New York, Delaware, West Virginia are participating in a process already under way to help us achieve the water quality goals outlined in this agreement. The governors of New York and Delaware have signed a formal agreement committing to assist the Chesapeake Bay Program partners to meet the water quality section goals of the *Chesapeake 2000* agreement.

The Bay Program partners are ensuring that we use the best science and data potentially available, and it is crucial that early stages of this effort be done correctly. Additional

refinements to the computer models have been made, including the inclusion of the latest data that will be used for individual tributary allocations for nutrient reductions that will be made in 2002. There will also be a complete public process to revise Tributary Strategies in order to meet the new reduction allocations.

All of the technological and data resources of the Bay Program partners are being used to effectively "rezone" the Bay. Rather than having one standard and criteria that will be the same throughout the Bay, we are using science to redefine the designated uses and criteria that will be best for each area of the Bay. This will likely require strengthening standards for sensitive migratory fish spawning and nursery habitat areas, but might require less effort in areas such as the deep trench of the Bay where there is limited living resources needs.

The schedule for implementation is already underway, and in 2002 we will see "cap loads" for nutrients and sediment allocated to the nine major tributary basins by state. EPA will also publish the proposed criteria and designated uses in the *Federal Register*. In 2003 the revised and new tributary strategies, with extensive public input, will be adopted, and the states will adopt Bay criteria and designated uses as water quality standards. In 2005 there will be a mid-course reevaluation of progress. In 2010, if the Bay water quality standards are attained, EPA will delist the Bay and its tidal tributaries. If not, a final TMDL for the 64,000 square mile Bay watershed will be developed.

These water quality goals and other commitments in the *Chesapeake 2000* agreement are groundbreaking. In the past, we have traditionally set environmental goals based on current technology and existing science. We are now setting environmental goals that will drive technology over the next decade. Science and industry will be partners as we go down this road to achieve a Chesapeake Bay that is no longer "impaired" in 2010. If we all continue to work together and keep our eyes on the prize we will get to where we must be in a decade or less. But it will not be easy.

We have learned many lessons in the Chesapeake Bay watershed some through what we have done well, and some through what we have done wrong. But the Bay Program partners have continued a tradition of being bold and innovative. Failure to achieve a

goal does not mean that it was a poorly set goal. Goals should always be challenging, and not be set within an easy grasp that would have been accomplished anyway. Some of the lessons learned from our experience that can be applied to most any environmental restoration project in the United States or elsewhere are:

INVOLVE ALL STAKEHOLDERS AND PARTNERS AT THE HIGHEST LEVEL: Involve all stakeholders in the decision-making process and have an institutional framework that will accommodate new partners. Stakeholders are much more likely to accept tough decisions and bolder goals if they were involved in the process that established them. The infrastructure of the Chesapeake Bay Program is weighted very heavily toward inclusion of anyone willing to come to the table. Ensure that the highest level policymakers are involved in the major decisions. This not only ensures acceptance by everyone of the policies adopted but also leads to bolder more challenging goals being set. Do not set up an interstate management program dominated by Federal agencies as the key decision-makers.

SET FAR-REACHING SCIENCE-BASED MEASURABLE GOALS: Set bold goals, with clear end points and/or interim milestones, and always have a temporal context. Use science and technology to help set far-reaching and measurable goals, but do not allow the limits of current technology and existing science to constrain what may occur in the future. Science and technology has advanced rapidly and when 10 year goals are set new innovations come along to help close gaps that were not originally foreseen. A decade ago, or even three years ago, most experts did not anticipate that we would be able to have nutrient removal technology for wastewater plants in the mid-Atlantic region that can effectively get the effluent down to 3 mg/liter. Now we know that we can achieve these levels, and that technology will be crucial for us to meet our water quality goals by 2010.

ENSURE PUBLIC SUPPORT: Without the support of the public, long term and costly environmental restoration projects would never be sustained or successful. This requires knowing what people are concerned about and communicating to the public how those concerns are being met. There is tremendous support throughout the entire Chesapeake Bay watershed for the restoration and protection efforts that have been underway for nearly two decades. We have also learned that the public measures our success by the living resources of the Bay region. Their sense of the Bay, their ownership, their yardstick is not how clear the

water is, not whether it is safe for swimming, but how well the crabs, rockfish, shad, oysters, ospreys and other local residents are doing. We know that restoring the Chesapeake and its tributaries makes good environmental and economic sense. But it is not only good policy to restore and protect the Bay -- public officials in the watershed also know that it is good politics.