

**REPORT OF THE**

# **Chesapeake Bay Commission**

**TO THE GENERAL ASSEMBLIES OF  
PENNSYLVANIA, MARYLAND AND VIRGINIA**



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1991**

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CHESAPEAKE BAY COMMISSION  
ANNUAL REPORT  
to the  
GENERAL ASSEMBLIES  
of  
PENNSYLVANIA, MARYLAND  
& VIRGINIA  
1988 and 1989

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## PREFACE

The Chesapeake Bay Commission was initially created in 1980 by the General Assemblies of the State of Maryland and the Commonwealth of Virginia. In 1985, the legislation was amended by mutual consent to provide for equal membership for the Commonwealth of Pennsylvania. The Tri-state Agreement on the Chesapeake Bay was enacted into law by the 1984 General Assemblies of the State of Maryland, the Commonwealth of Virginia and the Commonwealth of Pennsylvania (Maryland Annotated Code, Article NR Sec. 8-302; Code of Virginia, Sections 62.1-69.5 to 62.1-69.20; Chapter Number 25 of the Acts of Pennsylvania of 1985). A copy of this law is included as Appendix A.

The creation of the Chesapeake Bay Commission represents an effort to examine ways in which intergovernmental coordination in management of the Bay can be enhanced and to identify and act upon those issues which can most effectively be addressed through joint actions of the three states.

The primary purposes of the Commission are to assist the legislatures of the three states in responding to problems of Bay-wide concern, and to encourage cooperative coordinated planning and action by the signatories and their executive agencies.

The duties of the Chesapeake Bay Commission are to:

- identify specific Bay management concerns requiring intergovernmental coordination and cooperation
- recommend to the states and to federal and local governments legislative and administrative actions necessary to encourage cooperative management of the Bay
- collect, analyze and disseminate information pertaining to the region and its resources for the respective legislative bodies
- represent the common interests of the signatories as they are affected by the activities of the federal government, and assist in monitoring those activities
- provide an arbitration forum to serve as an advisory mediator for conflicts among the states.

The Commission maintains its principal office in Annapolis, Maryland with additional staff in both Virginia and Pennsylvania. The staff is available to assist any member of the General Assembly of any signatory state on any matters pertaining to Chesapeake Bay.

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# Chapter I

## INTRODUCTION

The Chesapeake Bay Commission is required by law to report to the General Assemblies of Maryland, Pennsylvania and Virginia on its activities and on the "status of interstate environmental and economic issues in the Chesapeake Bay Region and the progress of coordinative efforts." This document is intended to fulfill that requirement.

The development and signing of the Chesapeake Bay Agreement in December of 1987 represented, in many respects, a high-water mark in the evolution of the multi-jurisdictional effort to restore the Chesapeake Bay. The Agreement constituted an absolute commitment on the part of the Environmental Protection Agency, the states of Maryland, Virginia and Pennsylvania, the District of Columbia and the Chesapeake Bay Commission to work together to achieve a set of specific goals within an identified timeframe. For the first time, all of the affected and involved jurisdictions are working together to develop and implement mutually agreed upon programs which will accomplish a single, identified goal: a healthier and more productive Chesapeake Bay ecosystem.

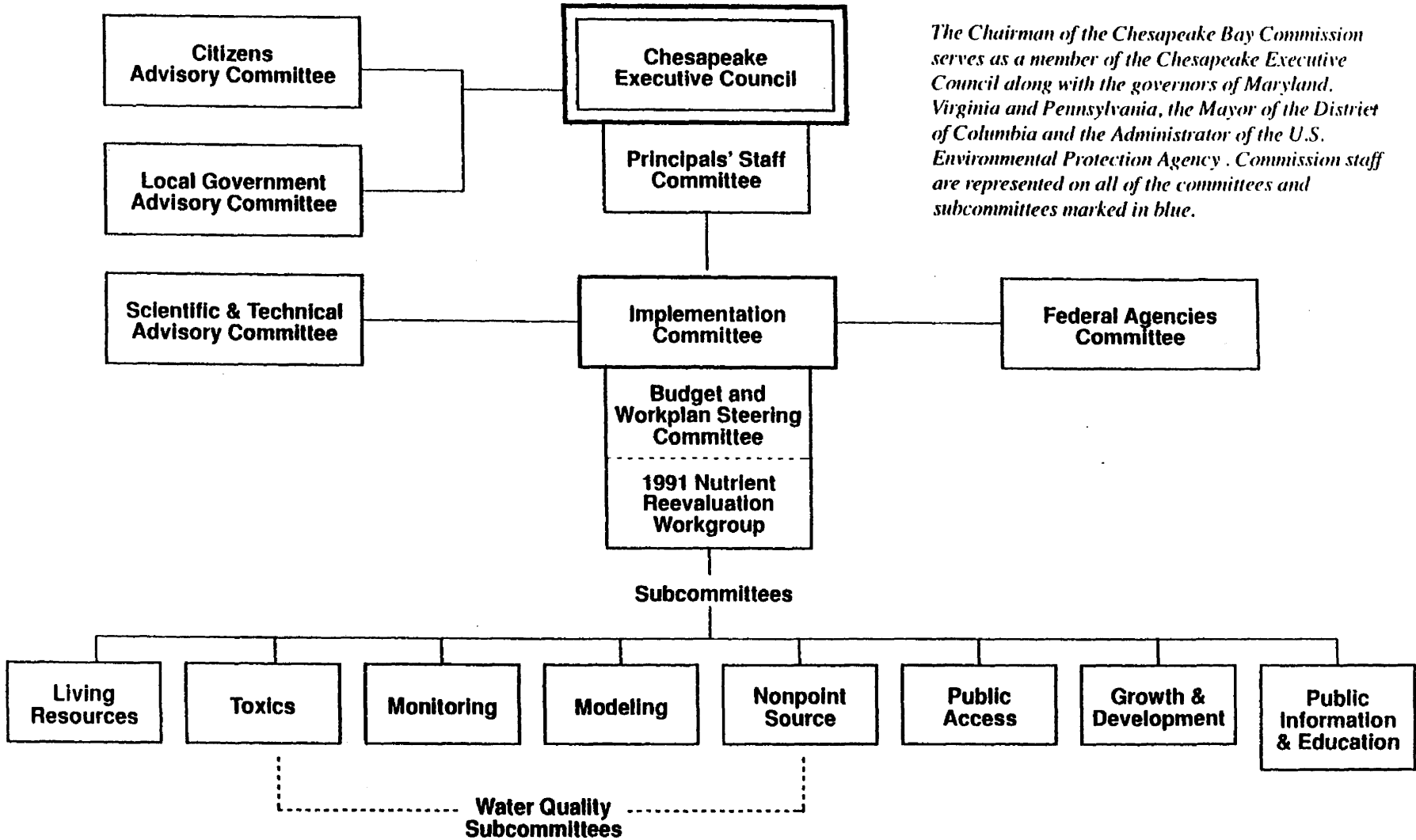
The signing of this Agreement has altered the entire face of the Chesapeake Bay restoration effort. Prior to 1988, the states, the District of Columbia and the federal government were bound by a very loose commitment to cooperate in efforts to protect the Bay. In fact, and on an operational level, meetings and joint ventures among the jurisdictional participants were relatively rare. An exception was the Chesapeake Bay Commission, which has worked since 1982 to assist and educate the legislatures of Maryland, Virginia and Pennsylvania on Bay-related issues of mutual interest to the three states.

The 1987 Chesapeake Bay Agreement has spawned numerous inter-jurisdictional working groups and it is now common to find all of the interested parties working together to find acceptable solutions to common problems. The Chesapeake Bay Commission has been centrally involved in this venture. A chart of the post-Bay Agreement organizational structure for the Chesapeake Bay Program appears on the following page.

The 1987 Chesapeake Bay Agreement has essentially constituted the environmental agenda for the Bay states over the past two years. The first year, 1988, was largely spent in developing plans and strategies to achieve our identified goals. The actual implementation of many of those strategies did not get firmly underway until 1989. For this reason, and because the emphasis for the entire Chesapeake Bay restoration effort has been re-defined over the past two years, the Chesapeake Bay Commission staff elected to publish a single "biennial" report for the years 1988 and 1989. This document, in conjunction with the issue papers and resolutions referred to herein, constitute that report.

*The Chesapeake Bay Commission has worked since 1982 to assist and educate the legislatures of Maryland, Virginia and Pennsylvania on Bay-related issues of mutual concern to the three states. The Commission is a signatory to the 1987 Chesapeake Bay Agreement.*

# MAJOR COMMITTEES IN THE CHESAPEAKE BAY PROGRAM



*The Chairman of the Chesapeake Bay Commission serves as a member of the Chesapeake Executive Council along with the governors of Maryland, Virginia and Pennsylvania, the Mayor of the District of Columbia and the Administrator of the U.S. Environmental Protection Agency. Commission staff are represented on all of the committees and subcommittees marked in blue.*

## Chapter II

# ROSTER OF MEMBERS

### 1988 and 1989

Honorable Robert S. Bloxom  
Honorable Torrey C. Brown, M.D.

Honorable Kenneth J. Cole

Honorable Jeffrey W. Coy  
Honorable Elmo G. Cross, Jr.  
Honorable John W. Daniel, II

Honorable Arthur A. Davis

Honorable Bernie Fowler  
Honorable Joseph V. Gartlan, Jr.  
Honorable Ronald A. Guns  
Honorable Irvine B. Hill  
Honorable James E. McClellan

Honorable W. Tayloe Murphy, Jr.

Honorable John Showers (1988)  
Honorable S. Wallace Stieffen  
Honorable Richard A. Tilghman  
Honorable Peter C. Wambach (1989)  
Honorable Michael H. Weir  
Honorable Noah W. Wenger  
Honorable Gerald W. Winegrad  
Honorable Jack F. Witten  
Honorable George B. Wolff

#### Staff

Ms. Ann Pesiri Swanson  
Mr. J. Claiborne Jones  
Ms. Patsy S. Cress  
Thomas W. Beauduy, Esquire  
Ms. Susan G. Dull

Virginia House of Delegates  
Secretary, Maryland Department of Natural Resources  
Pennsylvania House of Representatives, Vice-Chairman 1988 & 1989  
Pennsylvania House of Representatives  
Senate of Virginia  
Secretary, Virginia Department of Natural Resources  
Secretary, Pennsylvania Department of Environmental Resources  
Maryland State Senate  
Senate of Virginia  
Maryland House of Delegates  
Virginia Citizen Representative  
Maryland House of Delegates, Vice-Chairman 1988 / Chairman 1989  
Virginia House of Delegates, Chairman 1988 / Vice-Chairman 1989  
Pennsylvania House of Representatives  
Virginia House of Delegates  
Senate of Pennsylvania  
Pennsylvania House of Representatives  
Maryland House of Delegates  
Senate of Pennsylvania  
Maryland State Senate  
Maryland Citizen Representative  
Pennsylvania Citizen Representative

Executive Director  
Assistant Director  
Administrative Assistant  
Pennsylvania Liaison  
Virginia Coordinator

*The Chesapeake Bay Commission membership consists of seven members from each of the three states. Each state's delegation includes two Senators, three Delegates or Representatives, the Governor or his designee and a citizen representative. The Commission has staff in Annapolis, Richmond and Harrisburg.*





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## Chapter III

# ACTIVITIES of the CHESAPEAKE BAY COMMISSION DURING 1988 and 1989

The Chesapeake Bay Commission met five times during 1988: on January 7 in Riva, Maryland; April 28 and 29 in Gettysburg, Pennsylvania; June 2 and 3 at Solomons, Maryland; September 8 and 9 in Fairfax County, Virginia; and November 17 and 18 in Richmond, Virginia. During 1989, the Commission also met five times: on January 6 in Annapolis, Maryland; April 27 and 28 in Harrisburg, Pennsylvania; June 22 and 23 in Easton, Maryland; September 7 and 8 in Norfolk, Virginia; and November 15 and 16 in Baltimore, Maryland. Individual state delegations met more frequently.

Activities of the Commission included:

- Delegate W. Tayloe Murphy, Jr. of Virginia was elected Chairman of the Commission for 1988. Delegate James E. McClellan of Maryland and Representative Kenneth J. Cole of Pennsylvania served as Vice-Chairmen.
- The Commission accepted the resignation of Ms. Margaret R. Johnston who had served as Executive Director of the Commission since 1981. Following public advertisement of the position and interviews conducted by the Executive Committee, Ms. Ann Pesiri Swanson was selected to serve as Executive Director of the Chesapeake Bay Commission. Ms. Swanson joined the staff in April of 1988.
- Delegate Ronald A. Guns of Maryland was appointed to the Commission as a replacement for Delegate Thomas A. Rymer who retired from the Maryland General Assembly.
- The Commission members and staff participated in the 1988 legislative sessions in Maryland, Virginia and Pennsylvania urging the adoption of legislation and budgetary measures to enhance the Bay protection effort. Among the major Commission-supported initiatives enacted in Maryland were a ban on the drilling for oil and gas in the waters of the Bay and its tributaries, repeal of the sunset date for the phosphate ban, creation of a Water Quality Revolving Loan Fund, and the establishment of a State Conservation Reserve Program. Legislative initiatives endorsed by the Commission and adopted by the Virginia General Assembly included the Chesapeake Bay Preservation Act, the Virginia Conservation Easement Act, major amendments to the administration and enforcement provisions of the Erosion and Sediment Control Law, and legislation authorizing the Virginia Water Control Board to enforce pretreatment permits issued by publicly owned treatment works. The Chesapeake Bay Commission's Pennsylvania delegation sponsored phosphate detergent ban legislation in 1989. The ban, which was adopted, will go into effect March 1, 1990 for all counties situated partially or wholly within the Susquehanna River Basin or the Lake Erie Basin, and becomes effective State-wide one year later. For more information concerning Chesapeake Bay initiatives during this two-year period, please refer to Chapter IV of the Annual Report.
- The Commission commissioned and received the final report of a study by the Pennsylvania State University entitled: "Assessment of the Impact of a Phosphate Detergent Ban on Water Quality in the Lower Susquehanna River/Chesapeake Bay". The report was

*The Chesapeake Bay Commission met five times in 1988 and five times in 1989. Individual state delegations met more frequently.*

*In 1988, the Chesapeake Bay Commission produced two white papers and recommendations on non-tidal wetlands management. Resolutions were adopted concerning the American Heritage Trust Act, EPA's budget allocation process and Pennsylvania's non-point source program.*

designed to evaluate the efficacy of a ban on the use of phosphate-containing detergents in Pennsylvania. The Commission was thoroughly briefed on the findings of the report and voted to support the phosphate ban legislation.

- The Commission unanimously endorsed a resolution requesting Governor Robert P. Casey of Pennsylvania to provide additional staff and resources to assist in the effective implementation of Pennsylvania's Nonpoint Source Nutrient Reduction Strategy. Six new positions were added through the Pennsylvania Chesapeake Bay Program in FY 88-89. An additional nine positions were added in FY 89-90.
- The Commission unanimously adopted a resolution requesting that the United States Environmental Protection Agency give the Bay jurisdictions additional flexibility to operate Chesapeake Bay programs consistent with individual state policies and program needs. Adjustments were made in both state and federal policies to address this request.
- Throughout 1988 and 1989, Commission staff participated as commitment team members in the development and review of the approximately thirty basinwide strategies designed to fulfill the commitments made in the 1987 Chesapeake Bay Agreement. Staff also prepared summaries of several major strategy documents with an accompanying analysis of the potential legislative and budgetary implications of strategy implementation. The strategy summaries and analyses covered nutrient and conventional pollutant reductions, public access, stock assessment, and resource management strategy schedules. These documents were forwarded to commitment team leaders for incorporation into the basinwide strategies. For additional information concerning the 1987 Chesapeake Bay Agreement and the strategies developed pursuant to the Agreement, please refer to Chapter V of the Annual Report.
- Commission staff in each of the individual jurisdictions worked throughout 1988 and 1989 to ensure that state-specific actions and policies having tri-state implications were coordinated and developed in a manner which was consistent with the positions and goals of the Chesapeake Bay Commission.
- During 1988 and 1989, Commission staff regularly briefed the Citizens Advisory Committee, the Scientific and Technical Advisory Committee and the Local Government Advisory Committee concerning Bay-related legislative issues in the three states.
- Executive Director Ann Pesiri Swanson participated as an active member of the Principals' Staff Committee, the Chesapeake Bay Program Implementation Committee, and as a member of the EPA Chesapeake Bay Program Budget Oversight and Review Committee, providing policy oversight on the implementation of the Chesapeake Bay Agreement.
- Commission staff responded to numerous informational requests throughout this period and accepted speaking engagements before many citizens' groups, legislators, and professional associations.
- 1988 Commission Chairman Delegate W. Tayloe Murphy, Jr. and Executive Director Ann Pesiri Swanson participated in the deliberations of the Year 2020 Panel which was created to assess projected population growth and land use trends in the Chesapeake Bay watershed through the year 2020 and to develop plans to accommodate that growth in an environmentally responsible manner. Commission members and staff also participated in the regional public hearings held to solicit input for the Panel. The Commission Chairman and

Executive Director were appointed by the Panel to chair the editorial committee for the Report. Commission staff supervised the design, production and distribution to the legislatures of the Report of the Year 2020 Panel.

- Commission staff assisted in the design and production of a documentary television presentation produced by Cox Cable Tidewater concerning the Chesapeake Bay Agreement and the Chesapeake Bay Initiatives. The Chairman and Executive Director were interviewed for the program, which was moderated by Commission member Irvine B. Hill.
- Commission Chairman W. Tayloe Murphy, Jr. and Executive Director Ann Pesiri Swanson briefed the initial meeting of the Chesapeake Bay Local Assistance Board in Richmond, Virginia regarding the role of the Chesapeake Bay Commission and land use initiatives being undertaken elsewhere in the Bay watershed.
- Commission staff assisted in the creation, orientation and organizational development of the Local Government Advisory Committee. It is the Commission's hope that this advisory committee to the Chesapeake Executive Council, created pursuant to the 1987 Chesapeake Bay Agreement, will provide local input and expertise to the Chesapeake Bay Program.
- The Commission received regular briefings throughout 1988 and 1989 concerning the functional and organizational structure of the Chesapeake Bay Program and the status of the commitments made in the 1987 Bay Agreement. Commission members discussed opportunities for improvement and conveyed their recommendations through the staff.
- Individual state delegations to the Commission met with staff throughout the course of the summer of 1988 to examine and discuss the strategies being developed pursuant to the 1987 Chesapeake Bay Agreement and to consider potential legislative actions which might be taken during the 1989 General Assembly sessions to enhance the states' capabilities to implement the strategies.
- In September, 1988, the Commission reviewed the status of federal legislation with implications for the Chesapeake Bay region, including, among others, the Atlantic Striped Bass Conservation Act, the American Heritage Trust Act and the Oyster Disease Research Assistance Act. The Commission expressed its support to the U.S. Congress for the Oyster Disease Research Assistance Act and unanimously adopted a resolution supporting the American Heritage Trust Act. The resolution was transmitted to the Congressional delegations of the three Bay states.
- Representative Jeffrey W. Coy, on behalf of the Pennsylvania delegation to the Commission, successfully sponsored legislation to ban the sale and use of phosphate-containing detergents in the Commonwealth of Pennsylvania. The Commission voted unanimously to support the phosphate ban legislation in Pennsylvania, which was adopted in 1989.
- Representative Coy also introduced legislation to require the development and implementation of nutrient management plans for individual farms. Commission members and staff have been instrumental in soliciting and encouraging the involvement of the affected publics in the process of developing this legislation.

- Commission staff briefed the Environmental Matters Committee of the Maryland General Assembly concerning Chesapeake Bay initiatives and assisted in the development and presentation of a non-tidal wetlands seminar for members of the Committee prior to the 1989 legislative session.
- During 1988, the Commission examined in detail the issue of non-tidal wetlands protection, hearing presentations concerning both the importance of the resource and the status of existing and proposed wetlands protection programs in each jurisdiction.
- Commission staff prepared a white paper entitled "Non-Tidal Wetlands Protection Programs for the Chesapeake Bay Region: A Review and Comparison". The document analyzes the recent trends and current status of non-tidal wetlands in the region and reviews the management approaches taken by Maryland, Virginia, Pennsylvania and Delaware to protect these resources. The paper summarizes, in matrix format, each of the states' programs and includes staff recommendations for elements to be included in an effective non-tidal wetlands protection program.
- The Commission adopted a Position Statement concerning the development of effective state non-tidal wetlands protection programs. The statement was distributed to members of the General Assembly in Maryland, Virginia and Pennsylvania and to other interested parties throughout the region. Staff and members participated in the drafting of legislation and revision of regulations pertinent to non-tidal wetlands in each of the three states. For additional information concerning the Commission's position on non-tidal wetlands protection, please refer to Chapter VI of the Annual Report.
- Commission staff consulted with the Bay states' Congressional staffs and with Congressional liaison staff from the Governors' Offices in an effort to enhance communications and coordination between the Chesapeake Bay Commission and the U.S. Congress. Commission staff participated in the planning for the Congressional oversight hearings concerning the Chesapeake Bay Program.
- In 1988, Senator Noah Wenger of Pennsylvania sponsored, and the Pennsylvania delegation supported, amendments to The Agricultural Area Security Law of 1981, providing for the purchase of conservation easements on agricultural lands.
- In September, 1988, Delegate W. Tayloe Murphy, Jr. testified, on behalf of the Chesapeake Bay Commission and as a member of the Chesapeake Executive Council, before the Subcommittee on Environmental Protection of the U.S. Senate Committee on Environment and Public Works. The Subcommittee held oversight hearings to review the current status of and recent progress in the Chesapeake Bay restoration and protection program.
- Representative Peter C. Wambach of Pennsylvania was appointed to the Chesapeake Bay Commission as a replacement for Representative John Showers, who did not seek re-election to his House seat.
- The Commission approved an agenda of proposed actions in November, 1988, to be addressed during the 1989 General Assembly sessions and in subsequent years. The agenda was distributed to the members of the legislature and state agency personnel in each of the three states.

- The Commission received an in-depth briefing on the Chesapeake Bay Basinwide Toxic Substances Reduction Strategy at its November 1988 meeting in Richmond, Virginia. The Commission offered its comments on the strategy to the Water Quality Work Group and reaffirmed a previously-adopted resolution concerning the elements which should be included in a toxics reduction strategy.
- In January, 1989, Delegate James E. McClellan of Maryland was elected Chairman of the Chesapeake Bay Commission for 1989. Vice-Chairmen serving during 1989 were Representative Kenneth J. Cole of Pennsylvania and Delegate W. Tayloe Murphy, Jr. of Virginia.
- The Commission received a detailed summary of the findings and recommendations of the Year 2020 Panel, released in January, 1989. The Commission unanimously elected Delegate W. Tayloe Murphy, Jr. to continue as its representative to the 2020 Panel as the Panel continued its deliberations concerning the priority and appropriate timeframes for implementation of its recommendations.
- In April, 1989, the Commission was briefed on major Chesapeake Bay-related legislation adopted and considered by each of the jurisdictions during the 1989 legislative sessions in order to further Commission efforts to promote coordinated programs and laws among the states.
- Commission staff provided technical assistance and oversight for the Virginia Non-tidal Wetlands Roundtable discussions throughout 1989. As a part of these discussions, Virginia Commission members and staff reviewed the effectiveness of forestry best management practices and recommended that these BMPs apply to agricultural activities as well.
- The Commission staff assisted the Virginia Commission on Population Growth and Development, created by the 1989 Virginia General Assembly, in assessing the short- and long-term implications of the findings of the 2020 Panel for the Commonwealth. Staff actively participated in all discussions as well as the preparation of a final report and legislation, to be introduced in the 1990 Session, calling for the creation of a Five-year Statutory Commission to address growth issues. Complementary issues addressed by Virginia Commission members and staff during 1989 included alternative small package wastewater treatment plants and infrastructure financing.
- Fisheries management plans for oysters, blue crabs and alosids were outlined for Commission members at the June meeting in Easton, Maryland. The Commission voted to endorse these plans for approval by the Chesapeake Executive Council.
- The Commission heard detailed presentations concerning pesticide use in the Chesapeake Bay region. A resolution calling for improved pesticide use and management in the watershed was adopted unanimously by the Commission. (See Appendix C).
- State and federal agency representatives briefed the Commission on the rationale behind and plans for the 1991 re-evaluation of the commitments in the 1987 Chesapeake Bay Agreement. The Commission expressed a strong interest in actively participating in this process. Executive Director Ann Pesiri Swanson was appointed to the Chesapeake Bay Program 1991 Re-evaluation Workgroup.
- The Commission received a major briefing on the current status of state and federal programs to address the problems of pollutant discharge from recreational and commercial vessels in the Chesapeake Bay and its tributaries. A white paper developed by Commission staff, "Boat Pump-Out Facilities for the Chesapeake Bay: A Review

*In 1989, the Commission produced whitepapers and recommendations on Boat Pump-Out, Oil Spill Prevention, and Oil Spill Liability and Compensation Statutes. Resolutions were adopted on Pesticides, Population Growth and Development, Pump-Out Facilities, and the federal Conservation Reserve Program.*

*The Chesapeake Bay  
Commission was awarded  
the 1989 Izaak Walton  
League-Du Pont  
Chesapeake Bay  
Conservation Award in the  
Public Service Category.*

and Recommendations" was reviewed and adopted by the Commission. The Commission also endorsed a resolution incorporating the recommendations included in the White Paper which was distributed to all members of the legislature in Virginia and Maryland, along with appropriate federal and state agency personnel. (See Appendix C and Chapter IX of this Annual Report).

- In September, 1989, the Commission adopted a resolution supporting the three priority recommendations of the Year 2020 Panel. (See Appendix C). Commission Chairman Delegate James E. McClellan presented these recommendations to the Chesapeake Executive Council in December of 1989.
- The Chesapeake Bay Commission initiated a project in cooperation with the Pennsylvania Chesapeake Bay Education Office to produce, in 1990, a slide/video presentation for local officials demonstrating best management practices that are applicable to development projects.
- The Chesapeake Bay Commission was awarded the 1989 Izaak Walton League-Du Pont Chesapeake Bay Conservation Award in the Public Service category. Commission Chairman Delegate James E. McClellan accepted the award on behalf of the Commission at the awards ceremony in Richmond, Virginia.
- Following a major oil spill in Alaska, and smaller spills along the Atlantic and Gulf coasts, the Commission began to address the issues of oil transportation on the Bay and measures which could be taken to minimize the possibility of a catastrophic spill in the Bay region. The Commission also examined oil spill liability and compensation statutes and spill response capacities in the region to assess the ability of the Bay states to react in a timely and efficient manner in the event of a spill. Commission members and staff worked with the Virginia Attorney General's Office and the Maryland House Environmental Matters Oil Exploration/Oil Spill Containment Workgroup on the development of oil spill liability and compensation legislation for introduction in the 1990 General Assembly sessions.
- The Commission also provided staff assistance to the Virginia Coal and Energy Commission in its study concerning the recodification of the Virginia Oil and Gas Act.
- Commission staff prepared two major white papers addressing issues related to oil in the Chesapeake Bay region. "Oil Spill Liability Statutes and Clean-up Programs for the Chesapeake Bay and Its Tributaries: A Review and Comparison" was discussed by the Commission at its September meeting and adopted in November. The paper, prepared in conjunction with the Virginia Attorney General's Office, provides an analysis and comparison in matrix form of oil spill liability and compensation statutes in each of the member states. Recommendations in the white paper are incorporated into major revisions of oil spill legislation to be considered by the Maryland and Virginia General Assemblies in 1990. "A Review of Oil Prevention Recommendations Made for the Chesapeake Bay Region" addresses actions which could be taken to minimize the possibility of a major spill occurring in the Chesapeake Bay. Most of these prevention recommendations are directed to federal agencies and programs which control shipping and transportation on the waters of the Bay. Commission members and staff are actively working with legislative members, state agencies' representatives and federal personnel to ensure implementation of the recommendations in 1990. (See Chapter VIII of this Annual Report).

- Executive Director Ann Pesiri Swanson participated in the planning and direction of a major legislative conference held in Seattle, Washington and sponsored by the Puget Sound Water Quality Authority and the United States Environmental Protection Agency. Commission members Delegate W. Tayloe Murphy, Jr. of Virginia and Senator Gerald W. Winegrad of Maryland, as well as the Executive Director, were invited speakers at the conference.
- Commission staff participated in several regional efforts throughout the country which were designed to attempt to construct inter-jurisdictional water management structures based on the Chesapeake Bay Commission model. These areas included Lake Champlain, the Ocean State/Bay State initiative for Narragansett Bay, Lake Pontchartrain and the Gulf of Mexico.

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## **COMMISSION STAFF ACTIVELY PARTICIPATES AS MEMBER OF:**

Budget and Workplan Steering Committee

Chesapeake Bay Advisory Committee to the  
Pennsylvania Conservation Commission

Chesapeake Bay Program Toxics Subcommittee

Chesapeake Bay Program Living Resources Subcommittee

Chesapeake Bay Stock Assessment Committee Policy Board

Federal Agencies Committee Ad Hoc Wetlands Task Force

Fishery Management Workgroup

Implementation Committee

Maryland Commission on Growth in the Chesapeake Bay Region

Population Growth and Development Subcommittee

Principals's Staff Committee

Public Access Subcommittee

Public Information and Education Subcommittee

Research Planning Advisory Group (to Scientific and Technical Advisory  
Committee)

Virginia Commission on Population Growth and Development  
(Secretary)

Virginia Non-tidal Wetlands Roundtable (Resource Group)

Wetlands Workgroup to Living Resources Subcommittee

Year 2020 Panel (alternate to Delegate W. Tayloe Murphy, Jr.)

1991 Re-evaluation Workgroup

2020 Workgroup to Develop Consensus Between Development and  
Environmental Communities

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*The Chesapeake Bay Commission participated in several regional efforts throughout the country which are attempting to construct inter-jurisdictional water management structures based on the Chesapeake Bay Commission model.*

- The Commission participated, along with members of the development and conservation communities, in a project to identify the common ground that exists between the two groups on growth and development issues. Overall, agreement was reached on 72% of the issues discussed. The Commission is continuing to work toward resolution of the issues that remain in disagreement.
- The Commission endorsed the Bay-wide fisheries management plan for striped bass and recommended its approval to the Chesapeake Executive Council. Legislation was drafted for introduction during the 1990 Session that would grant Maryland's Department of Natural Resources the authority to implement fisheries management plans through regulations.
- The Commission unanimously endorsed a resolution to the U.S. Congress proposed by Senator Noah Wenger of Pennsylvania encouraging the adoption of the 1990 Farm Bill and encouraging that the Conservation Reserve Program provisions of that statute be expanded to provide for additional emphasis on water quality and less restrictive requirements for eligible lands. (See Appendix C) The resolution of the Commission will be conveyed to the Congressional delegations of the Bay states and to the members of the U.S. House and Senate Agriculture Committees at the start of the 1990 Congressional Session.
- Maryland Commission members Senator Bernie Fowler and Delegate Ronald A. Guns were appointed by Governor Schaefer to the Maryland Governor's Commission on Growth in the Chesapeake Bay Region. Executive Director Ann Pesiri Swanson was named a member of the Senior Council to the Commission. The Growth Commission is expected to develop recommendations for action by Fall of 1990.
- The Chesapeake Bay Commission conveyed its position concerning the protection of non-tidal wetlands to the President of the United States and commented on the importance of the pending Memorandum of Agreement between the Environmental Protection Agency and the U.S. Army Corps of Engineers.
- Throughout the summer and fall of 1989, individual state delegations and the full Commission discussed potential Bay-related legislative and budgetary initiatives to be considered by the legislatures of the member states during 1990.
- The Chesapeake Bay Commission participated in the annual meeting of the Chesapeake Executive Council in Washington, D.C. on December 19, 1989. Reports on the activities and accomplishments, as well as future plans, of the Commission were reported to the Executive Council by Commission Chairman James E. McClellan and Executive Director Ann Pesiri Swanson.

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## Chapter IV

# CHESAPEAKE BAY-RELATED INITIATIVES ADOPTED DURING 1988 and 1989

Throughout 1988 and 1989, the member states of the Chesapeake Bay Commission, as well as the District of Columbia and the Federal Government, continued to enact and adopt programs, policies, laws and budgets to further implement the commitments made in the 1987 Chesapeake Bay Agreement. Those commitments and the significance of the Bay Agreement are explored more fully in Chapter V.

The programs and policies initiated by the Bay-area jurisdictions in 1984, and strengthened in 1987, have been supported without exception through the legislative and budgetary process over the past six years. The Chesapeake Bay cleanup effort has, in fact, become an essential element in the environmental agenda of each of the three member states and, as a result, a model for estuarine management throughout the nation.

This chapter briefly summarizes the legislative actions which were taken by the Bay states in 1988 and 1989 to move forward in this unique cooperative venture to restore the Chesapeake Bay. It is anticipated that the 1990 legislative sessions will once again affirm the states' commitment to a healthier and more productive Chesapeake Bay. More detailed reviews of legislative and budgetary commitments may be found in the Legislative Updates published annually by the Commission.

## VIRGINIA

### 1988

The Chesapeake Bay was given a high priority by the 1988 Session of the Virginia General Assembly. Many of the issues considered by the legislature addressed problems and responded to recommendations which had previously been raised by the Chesapeake Bay Commission.

Of major importance was the passage of the Chesapeake Bay Preservation Act. The legislation created the Chesapeake Bay Local Assistance Board for the administration of a cooperative state-local program to incorporate water quality protection measures into the land use planning and regulatory mechanisms of Tidewater localities. The Act became effective on July 1, 1988. Implementing regulations were adopted by the Local Assistance Board 18 months later, in July of 1989.

These regulations are currently being challenged in court by a group of landowners who contend that the regulations are an invalid abridgement of the rights of those who wish to develop their property. The regulations require Tidewater localities to delineate Chesapeake Bay Preservation Areas, using specified criteria, and to designate those areas as either "Resource Management Areas" or "Resource Protection Areas". Resource Protection Areas are sensitive land areas at or near the shoreline. The elements of local programs, once adopted and approved, are to be incorporated into local comprehensive plans, zoning and subdivision ordinances and other land use guidelines. A more complete review of this program is found in Chapter VII.

The Virginia General Assembly adopted two statutes in 1988 to strengthen the administrative and enforcement provisions of the Erosion and Sediment Control

*The Chesapeake Bay cleanup effort has become an essential element in the environmental agenda of each of the three member states and, as a result, a model for estuarine management throughout the nation.*

Law. One gives the authorities who approve erosion plans additional flexibility in imposing monitoring and restoration requirements on permittees and also allows for civil penalties for violations of the Law. The other law, which is more administrative in nature, authorizes local governments to regulate "erosion impact areas", which are those land areas not related to current land development projects but subject to persistent erosion and delivery of sediment onto adjacent properties or into state waters. The bill also allows the State Soil and Water Conservation Board to review local erosion and sediment control programs to ensure the effective implementation and enforcement of those programs.

Legislation to establish procedures for the acquisition and holding of conservation easements by certain non-profit organizations was also adopted. Similar legislation had failed to pass in Virginia on several previous occasions.

In an important water quality measure, legislation was enacted to authorize the State Water Control Board to enforce pretreatment permits issued by publicly owned treatment works. The bill allowed the Water Board to assume pretreatment delegation from the Environmental Protection Agency.

## 1989

The Commonwealth continued to demonstrate its commitment to the Chesapeake Bay clean-up effort through the 1989 session of the General Assembly. Issues related to water quality received a great deal of attention, particularly those concerning in-stream flow, stormwater management, flood control, oil drilling, failing septic tanks, and problems related to combined sewer overflow.

Legislation was adopted to prohibit water-based oil drilling in the Chesapeake Bay and its tributaries. The measure is similar to a ban on oil and gas drilling enacted by Maryland in 1988. Both states are actively reviewing regulations and potential implications of land-based, directional drilling for oil and gas within the watershed.

A legislative package of four bills designed to reinforce State policy related to in-stream flow was adopted. The legislation limits the use of state waters to those which are deemed to be "beneficial" to the protection of water quantity and quality. Regulations concerning the withdrawal of surface water were also strengthened.

Legislation was enacted to establish a statewide program to specifically address water quality issues related to post-development runoff resulting from storm events. The program is based upon voluntary local compliance with State-developed standards and regulations.

New legislative study commissions were created to address the issues of small package sewage treatment plants and various alternatives for on-site sewage disposal and to study combined sewer overflow problems in the Commonwealth.

The General Assembly also created a Statewide Commission on Population Growth and Development to be staffed by the Center for Public Policy at the University of Virginia. The focus of the Commission is to evaluate the need for statewide planning and to statistically analyze Virginia's population growth patterns and land use trends. For more information on the Commission and other activities related to population growth and development, see Chapter VII of the Annual Report.

The Virginia Fish Passage Grant and Revolving Loan Fund was created to finance the construction of fish ladders and passageways. The Fund provides low interest loans for the construction of fish passageways at municipally and privately-owned dams. Breaching of dams on the James and Rappahannock Rivers is expected to allow access of anadromous species such as shad and striped bass to traditional spawning grounds which have been blocked by man-made structures.

*"If we do not deal with issues of land development and management as well as specific point source discharges, we will not be able to achieve our water quality and habitat protection goals for Chesapeake Bay."*

*Land Use Initiatives for Tidewater Virginia: The Findings and Recommendations of the Chesapeake Bay Land Use Roundtable. November 1987.*

Several important land conservation issues were addressed in 1989. The Virginia Natural Heritage Program was established within the newly-created Department of Conservation and Recreation for the purpose of maintaining an inventory of natural areas within the Commonwealth. The issue of protection of non-tidal wetlands was debated extensively and was addressed in several ways. These are more fully described in Chapter V of the Annual Report.

Finally, major legislation was adopted which reorganizes the state's pesticide program by creating within the Department of Agriculture and Consumer Services an 11-member Pesticide Control Board to comprehensively manage the use, application and storage of pesticides within the Commonwealth to protect human health and natural resources. The Board will oversee the testing of pesticides for use, licensing of pesticide businesses, and training and certification of applicators. The legislation also promotes integrated pest management techniques and the use of non-chemical pesticides.

## MARYLAND

### 1988

The Chesapeake Bay-related initiatives adopted by the 1988 session of the Maryland General Assembly continued the State's commitment to the Bay. Many existing programs were strengthened and several new programs were enacted.

In the area of living resources protection and management, a bill was adopted to impose a two-year waiting period for a person applying for a new commercial fishing license to take crabs, finfish, oysters or clams. The delay does not apply to license renewals, including those on inactive status, or to applicants holding a commercial fishing license in another state for the two years preceding the application. This will enable fisheries managers to better gauge the level of effort which is likely to be imposed on the fishery in a given year and to adjust management regulations accordingly.

Legislation mandating State initiatives for the development of a viable aquaculture industry in Maryland was also enacted. The bill designates the Department of Agriculture as the lead agency for promoting and marketing aquaculture, the Department of Natural Resources as the lead agency regulating the industry, and the University of Maryland as the lead agency for aquaculture research. An 18-member Aquaculture Advisory Committee was also established to consult with the appropriate legislative committees to formulate proposals for advancing aquaculture in the tidal waters of the State.

After several failed attempts, legislation was enacted to establish a State Chesapeake Bay and Endangered Species Fund to be financed by a voluntary income tax checkoff. The Fund is dedicated specifically to projects and programs which benefit the wildlife and water resources of the Chesapeake Bay. Nearly one million dollars was collected in contributions during the 1989 tax-filing season.

In the area of water quality protection and improvement, a bill was adopted to prohibit drilling for oil and gas in the waters of the Chesapeake Bay or its tributaries. The legislation was enacted in response to renewed interest on the part of the oil industry to increase domestic production of hydrocarbons.

Following the release of findings that the ban on phosphate-containing detergents enacted in 1985 was even more beneficial than had been projected, the Legislature repealed the December 1989 sunset date for the phosphate ban. The ban is therefore permanently instated. In order to assist the state and local governments in assuming a larger proportion of the financial burden for the construction and operation of wastewater treatment plants in the State, legislation was adopted to establish a Maryland Water Quality Financing Administration and a Maryland Water Quality Revolving Loan Fund.

*Thousands of miles of fish spawning habitat on Chesapeake Bay tributaries are currently blocked by dams, culverts and other obstructions. Restoring and protecting the Bay's vital fishery resources are integral components of the 1987 Chesapeake Bay Agreement.*

*The Commission believes that the long term need to substantially reduce phosphorus in the Bay cannot be accomplished without phosphorus removal technology at sewage treatment plants. The elimination of the use of phosphate detergents is a significant component of an overall phosphorus reduction strategy.*

Important legislation was enacted to reduce the flow of nutrients from some sewage treatment plants in the watershed. Certain sewage treatment plants discharging to the Patuxent River and its tributaries are required to reduce the levels of phosphorus and nitrogen in their effluent discharges. The required reductions are phased in over several years and the ultimate limits vary according to plant capacity. The Department of the Environment is required to impose penalties and collect fines from plants which do not meet the limitations. The penalties are based on a per-pound charge for each pound of phosphorus and nitrogen which is discharged in excess of the mandated levels.

A State Conservation Reserve Program was created for farmland. Like the Federal Conservation Reserve Program, the state effort is intended to encourage the removal of highly erodible cropland from production, thereby reducing non-point source runoff from agricultural fields. Eligibility criteria for enrollment in the program are specified in the new law and qualified owners who wish to participate in the program receive a payment of \$20.00 per acre per year for a limited number of years.

## **1989**

The major legislative thrust in Maryland during 1989 was in the area of non-tidal wetlands protection. As discussed in a subsequent chapter of this report, these efforts resulted in the passage of the Maryland Non-tidal Wetlands Protection Act. For information concerning the background and substance of the legislation, please refer to Chapter VI.

Issues related to pesticides and other toxic chemicals were of particular interest in Maryland during the 1989 legislative session. Several bills were introduced to reduce the numbers or amounts of toxic chemicals flowing into the Bay or to ban the use of specific pesticides which have been identified as having potentially harmful effects on Bay resources. These bills, representing a largely piecemeal approach to the problem of toxics in the Bay, were not ultimately enacted, but a resolution was adopted requesting the Departments of Environment and Agriculture to consider the impact of pesticide use on groundwater when developing their comprehensive groundwater protection strategies. The resolution also requests the Departments to expand existing studies, to establish a pilot program to monitor and test surface and groundwater for pesticides, and to work with federal agencies to develop a statewide monitoring program.

In response to concerns raised by the Chesapeake Bay Commission, and others, concerning the adequacy of boat pump-out facilities in the region, legislation was adopted to prohibit the construction of new marinas or the addition of slips to an existing marina unless adequate pump-out facilities are provided at the marina or the marina has a contract with a nearby pump-out facility. This provision should significantly assist the State in stemming the increase in the discharge of pollutants from commercial and recreational vessels.

Under new 1989 legislation, federal construction projects will be required to meet the same requirements for sediment control and stormwater management that are applicable to other construction projects undertaken in the State. Bills were also enacted to expand the program for the replacement of forest land and tree cover cleared due to State construction activities. A Green Shores Program was established within the Department of Natural Resources to promote the planting and maintenance of forested buffer strips along the Bay and its tributaries.

# PENNSYLVANIA

## 1988

Unlike the Maryland and Virginia legislatures which have more abbreviated annual sessions, Pennsylvania's is considered a full-time legislature with sessions that begin in January of odd-numbered years and run through November of the following year. Thus, it is difficult to categorize legislative initiatives as having been achieved in a particular year since bills are frequently introduced in one year, but not enacted until the following year.

Pennsylvania's Susquehanna River Basin is characterized by predominantly agricultural lands. Since the Susquehanna contributes roughly 50% of the freshwater to the Chesapeake Bay, it is not surprising that agricultural nonpoint source control programs comprise the major component of Pennsylvania's Bay Program. Financial and manpower commitments to the program have increased substantially since the program was initiated in 1985 but the provision of staff resources for program implementation remains a concern.

Early in 1988, the Pennsylvania General Assembly adopted a 25-year, \$2.5 billion infrastructure program. Referred to as PENNVEST (the Pennsylvania Infrastructure Investment Authority), the program is designed to combine traditional funding sources and innovative financing techniques to maximize funding for water and sewer infrastructure projects. PENNVEST replaces the Water Facilities Loan Board and coordinates all state and federal funds for distribution through grants and loans and provides other methods of providing financial assistance, including bond and loan guarantees and bond insurance.

In April of 1988, Pennsylvania voters overwhelmingly approved a \$300 million bond issue referendum to expand and improve water and sewer systems throughout the state as one component of the PENNVEST program. The initial phase of the program will involve expenditures of state funds of almost \$700 million and will also utilize federal revolving loan fund dollars.

Other issues addressed in Pennsylvania during 1988 included a major revision of the State's regulatory program to control erosion and sediment pollution from agricultural as well as non-agricultural lands and the commissioning of a study, requested and funded by the Chesapeake Bay Commission, to assess the potential effectiveness of a phosphate detergent ban in the Commonwealth.

That study, conducted by the Environmental Resources Research Institute of The Pennsylvania State University, was reviewed and thoroughly discussed by the Commission. Based on the study and the full backing of the Chesapeake Bay Commission, phosphate ban legislation was introduced late in 1988. It was the subject of a public hearing, but was never considered by either chamber before the session ended.

## 1989

The phosphate ban legislation was re-introduced early in 1989 and was swiftly passed out of committee with amendments. The amendments essentially called for phased implementation of the ban and a provision to sunset the legislation on December 31, 1992, unless otherwise extended by act of the General Assembly. The legislation, as amended, was passed unanimously by both the House and the Senate. It established an implementation date of March 1, 1990 for all counties situated partially or wholly within the Susquehanna River Basin or in the Lake Erie Basin. Implementation will occur in all other counties one year later.

A second major legislative initiative under consideration in 1989, and carried over into 1990, deals with the issue of nutrient management. The bill seeks to address nonpoint source nutrient loadings from both agricultural and non-agricultural sources by providing a comprehensive review of the nutrient contribution to

*"In the past 30 years, losses of our coastal and inland wetlands have averaged more than 2,800 acres annually. In order to counter these dramatic declines, the overall goal of the state non-tidal wetlands protection program should be to strive toward the long-term goal of a net resource gain in wetlands function and acreage."*

*The Development of Effective Non-tidal Wetlands Protection Programs: A Chesapeake Bay Position Statement, Adopted November 17, 1988*

*" ...nutrients are no exception to the old adage that too much of a good thing spells trouble. The need to legislate their management stems from the fact that we indeed have too much of a good thing."*

*Representative Jeffrey W. Coy, prime sponsor of H.B. 1838, the Nutrient Management Act. October 19, 1989.*

nonpoint source pollution of both surface and groundwater from agricultural and non-agricultural activities. Furthermore, it requires (and lays out an implementation schedule for) the application of nutrient management control measures (i.e., nutrient management plans) for all agricultural operations. The development of a strategic plan to identify the amount of excess animal manure generated in the Commonwealth and to assess the adequacy of alternative uses or disposal options is also a component of the bill.

The bill's focus is not limited to non-point pollution stemming from agriculture. It provides for an assessment of the impact of non-agricultural activities, including on-lot septic systems, septic cleansers, residential fertilizers, stormwater runoff, water well construction, and similar activities, and calls for any regulatory or statutory recommendations necessary to abate nutrient pollution from these sources.

It is expected that the nutrient management bill will be the subject of serious discussion and debate during 1990. If enacted, the legislation would be the first of its kind in the Bay region. If effectively implemented, it would represent a major step in Pennsylvania's program to reduce the flow of nutrients to the Susquehanna River and, thus, to the Chesapeake Bay.

Pennsylvania is also actively considering issues related to wetlands and several regulatory and legislative initiatives are under discussion. Pennsylvania's wetlands protection program is discussed in Chapter VI of the Annual Report.

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## Chapter V

# The 1987 CHESAPEAKE BAY AGREEMENT

In December of 1987, the Governors of Maryland, Virginia and Pennsylvania, the Chairman of the Chesapeake Bay Commission, the Mayor of the District of Columbia, and the Administrator of the U.S. Environmental Protection Agency (on behalf of the Federal Government) met in Baltimore, Maryland to sign the 1987 Chesapeake Bay Agreement. The signing of this landmark document signalled the beginning of a new era in basin-wide efforts to restore the Chesapeake Bay to its former levels of water quality and living resources productivity.

The 1987 Agreement represents a significant departure from the brief declaration of purpose signed in 1983 at George Mason University in Fairfax, Virginia which initiated the joint State-Federal cleanup effort. We have now moved from the general spirit of cooperation and coordination which was engendered by that earlier Agreement into a more specific goal-oriented complex of programs with specific, meaningful and measurable targets and timeframes. The new pact includes 32 specific commitments and, in almost all cases, deadlines for achieving the identified objectives. The Agreement marks the Chesapeake Bay Program as one of the premiere estuarine management programs in the nation. To date, all milestones and timeframes contained in the Agreement have been met.

The 1987 Chesapeake Bay Agreement has, to a large extent, re-defined the goals and roles of the state and federal agencies which are committed to the Bay protection effort. The Agreement, and the commitments contained therein, provide a focus to direct the efforts of all jurisdictions within the watershed and provide both specificity and a sense of urgency to the Bay Program. These efforts have required, and will continue to require, both legislative and administrative backing. As a signatory, the Chesapeake Bay Commission shares in this responsibility.

The Bay Agreement outlines six broad categories in which the Bay protection efforts are to be concentrated in the coming years. These include water quality, living resources, public access, population growth and development, public information and education, and "governance", or the overall coordination of all these efforts. Significantly, the Agreement identifies the productivity, diversity and abundance of living resources within the system as the best ultimate measures of the Chesapeake Bay's condition. Living resources, then, are clearly specified as the yardstick by which we can measure our success. The health and status of the Bay's living resources, however, can only be gauged in a relative sense over a period of time and monitoring programs are an important element in the overall Bay Program. The Agreement, and the strategies developed pursuant to its signing, provide a blueprint for current and future directions in the Bay restoration and protection effort as well as specific milestones by which we might assess our progress.

The major commitments included in the 1987 Chesapeake Bay Agreement are summarized below. To meet these commitments, the signatories first devoted their energies to developing agreed upon strategies and in many cases, a time-oriented work plan. Development of these strategies has, in all cases, been accomplished within the timeframes established in the Chesapeake Bay Agreement. Summary fact sheets describing the strategies which have been developed to date are available from the Chesapeake Bay Liaison Office, 410 Severn Avenue, Annapolis, Maryland 21401. The complete text of the Agreement is included as Appendix B.

*We have now moved from the general spirit of cooperation and coordination ... into a more specific goal-oriented complex of programs ...*



*Living resources are clearly specified as the yardstick by which we can measure our success.*

## Living Resources

The 1987 Chesapeake Bay Agreement commits the signatories:

- by January 1988, to develop and adopt guidelines for the protection of water quality and habitat conditions necessary to support living resources in the Chesapeake, and to use these guidelines in the implementation of water quality and habitat protection programs;
- by July 1988, to develop, adopt and begin to implement a Bay-wide plan for the assessment of commercially, recreationally and selected ecologically valuable species;
- by July 1988, to adopt a schedule for the development of Bay-wide resource management strategies for important species;
- by July 1989, to develop, adopt and begin to implement Bay-wide management plans for oysters, blue crabs and American shad and to begin developing management plans for other major species by 1990;
- by December 1988, to develop a Bay-wide policy for the protection of tidal and non-tidal wetlands;
- Provide for fish passage at dams, and remove stream blockages wherever necessary to restore natural passage for migratory fish.

The Living Resources Subcommittee of the Chesapeake Bay Program Implementation Committee has been charged with ensuring that these commitments are met and overseeing the development of plans which will guarantee their implementation. The Subcommittee consists of representatives from each of the signatories to the Bay Agreement and all affected federal agencies.

A Chesapeake Bay Stock Assessment Committee has been formed to analyze required improvements in both fishery-dependent and fishery-independent data collection and analysis. There are a number of individuals and institutions currently working on some aspect of stock assessment in the Bay region. Fisheries scientists and managers have at their disposal a wide array of sophisticated management tools. The most critical need at this juncture is to ensure that the data which drives these models, and defines management options, is the most accurate and the most appropriate data which can be collected and compiled. The Stock Assessment Committee has been sub-divided into a Technical Working Group and a Policy Board. The Commission's staff plays an active role on the Policy Board, ensuring that scientists and managers are working in concert in the policy arena.

A Fisheries Management Workgroup composed of fisheries managers from each of the states and the District of Columbia has developed Bay-wide management plans as required for oysters, blue crabs and alosids (shad and river herring). Schedules have been adopted for the development of management plans for nine additional important fisheries including species such as yellow perch, spot, drum, croaker and more. A Bay-wide management plan for striped bass was developed and approved in December of 1989. This plan was completed six months ahead of schedule as a result of improvement in the reproductive success of striped bass in Maryland waters since the imposition of a moratorium on the taking of the species in 1985.

Both Maryland and Virginia had imposed moratoria on the striped bass fishery in order to conform with the Atlantic States Marine Fisheries Commission's management plan for striped bass along the Atlantic seaboard. Lifting the moratorium was contingent upon the Maryland young of the year index reaching a three-year average of 8.0, a goal which was achieved in 1989. It is anticipated that a very limited commercial and recreational fishery for striped bass will be opened in Maryland and Virginia during 1990.

The Bay-wide management plans for the protection of tidal and non-tidal wetlands have been developed and are currently being implemented and/or studied

in each of the jurisdictions. Initiatives concerning non-tidal wetlands are discussed more fully in Chapter VI of this Annual Report.

Steps have been taken in Maryland, Virginia and Pennsylvania to provide for fish passage at dams and to remove stream blockages which prevent anadromous species from reaching their traditional spawning grounds. In Pennsylvania, agreement has been reached between the Federal Energy Regulatory Commission and the Philadelphia Electric Company to require the construction of fish passageways at Conowingo Dam and plans are underway to breach the other hydroelectric facilities which block passage on the Susquehanna River. In Virginia, legislation has been adopted to create a Revolving Loan Fund for the construction of fish passageways and plans are underway to open additional miles of potential spawning grounds in the Rappahannock and James Rivers. Maryland's efforts to date have concentrated on the Patapsco River and a budget initiative is currently pending to breach Bloede Dam on the Patapsco.

## Water Quality

The 1987 Chesapeake Bay Agreement commits the signatories:

- by July, 1988, to develop, adopt and begin implementation of a basin-wide strategy to reduce by 40% the amounts of nitrogen and phosphorus entering the main stem of the Chesapeake Bay by the year 2000;
- by December 1991, to re-evaluate the 40% reduction target based on the results of modeling, research, monitoring and other information available at that time;
- by December 1988, to develop, adopt and begin implementation of a basin-wide strategy to achieve a reduction in toxic substances entering the Bay consistent with the requirements of the Water Quality Act of 1987;
- by July 1988, to develop and adopt a basin-wide implementation strategy for the management and control of conventional pollutants entering the Bay system from point and nonpoint sources, as required by the Water Quality Act of 1987;
- by July 1988, the Environmental Protection Agency will develop, adopt and begin implementation of a strategy for the control and reduction of point and nonpoint sources of nutrient, toxic and conventional pollution from all federal facilities.

These commitments represent the most specific and the most ambitious of those included in the 1987 Chesapeake Bay Agreement. They also offer the greatest opportunity for success in reversing the deteriorating water quality trends in the Chesapeake Bay system. Excessive nutrient enrichment (i.e., eutrophication) is widely believed to be the single most important factor in the declining water quality and productivity of the Chesapeake Bay. Excess phosphorus and nitrogen foster explosive growth in algal populations in the waters of the Bay. As these algae die and decompose, they consume oxygen which is necessary for the growth of other organisms and prevent the sunlight which is required for photosynthetic reactions from reaching submerged aquatic plants.

The plan to reduce the levels of these nutrients reaching the mainstem of the Bay is among the most aggressive in the nation. The plan has been conceived in three phases. Phase I includes those actions taken and reductions achieved between the base year of 1985 and the development of the strategy in 1988; Phase II includes those actions which are in the planning stages and for which funding is planned during the period from 1988 to 1991; Phase III will include those actions deemed necessary to achieve the reduction target following the 1991 re-evaluation of the basin-wide strategy. Strategies within the plan include the maintenance and en-

*The Water Quality commitments represent the most specific and the most ambitious of those included in the 1987 Chesapeake Bay Agreement. They also offer the greatest opportunity for success in reversing the deteriorating water quality ...*

*"Effectively managing our population growth will require committed leadership and a keen sense of vision."*

*Year 2020 Report, December 1988*

hancement of existing point and nonpoint source control programs as well as new initiatives.

The commitment to re-evaluate the strategy in 1991 is particularly significant. It signals the clear intent of the signatories to monitor progress and to remain flexible in terms of the steps which will be necessary to fully implement this strategy. By 1991, we will have additional monitoring and research data concerning the success of current programs. It is also anticipated that a new three-dimensional, time-variable computer model of the Bay, currently being developed by the Environmental Protection Agency and the U.S. Army Corps of Engineers, will be completed early in 1991. This new analytical tool will give scientists and managers additional capabilities both in terms of assessing progress and projecting more accurately the effects of future actions. The model should allow the Bay states to more precisely ascertain what results have been achieved in various geographical areas and what additional steps or refinements will be necessary in order to reach the 40% nutrient reduction target by the year 2000.

Because point source programs, as well as erosion and sediment control and stormwater management programs, have been in place in each of the jurisdictions for a number of years, the strategy for the management and control of conventional pollutants (e.g., biochemical oxygen demand, suspended solids, pH, bacterial contamination, sediment erosion, etc.) basically consists of maintaining and strengthening existing efforts. The strategies address both point and nonpoint sources as well as financial aid programs to assist local governments in developing, implementing and enforcing programs to combat sources of conventional pollutants.

The commitment to develop a basin-wide strategy to reduce toxic inputs to the Bay represents a major initiative for the Bay states. This is an issue which has not heretofore been addressed in a comprehensive fashion by the Bay Program, a lack frequently cited by the Bay user community over the past several years. A Toxics Subcommittee has been formed with representation from each of the signatories to implement the strategy to reduce the inputs of toxic substances from point and nonpoint sources to the Bay system.

The Agreement itself calls upon the jurisdictions to develop a strategy to achieve a reduction of toxics "consistent with the Water Quality Act of 1987 which will ensure protection of human health and living resources."

The actual strategy which was developed by the multi-jurisdictional Task Force and approved by the Executive Council in December of 1988, anticipates that the signatories will move beyond the strict requirements of federal law to provide additional protection to the Bay system through the increased utilization of biomonitoring, toxics "fingerprinting" and other state-of-the-art technologies. Toxics research in the Bay region, however, is in its infancy. Little is known about the source, fate and effects, or even the identity, of toxic substances in the sediments and water column of the Chesapeake Bay. Much additional research and an intensive monitoring system will be required in attempting to implement an effective basin-wide toxics reduction plan.

## **Population Growth and Development**

The 1987 Chesapeake Bay Agreement commits the signatories:

- to commission a panel of experts to report, by December 1988, on anticipated population growth and land development patterns in the Bay region through the year 2020, the infrastructure requirements necessary to serve growth and development, environmental programs needed to improve Bay resources while accommodating growth, alternative means of managing and directing growth and alternative mechanisms for financing governmental services and environmental controls. The panel of experts will consist of twelve members: three each from Virginia, Maryland and Pennsylvania, and

one each from the District of Columbia, the Environmental Protection Agency and the Chesapeake Bay Commission;

- by January 1989, to adopt development policies and guidelines designed to reduce adverse impacts on the water quality and living resources of the Bay, including minimum best management practices for development and to cooperatively assist local governments in evaluating land-use and development decisions within their purview, consistent with the policies and guidelines;
- to evaluate state and federal development projects in light of their potential impacts on water quality and living resources of the Chesapeake Bay, and design and carry out each state and federal development project so as to serve as a model for the private sector in terms of land-use practices;
- by December 1988, to develop a strategy to provide incentives, technical assistance and guidance to local governments to actively encourage them to incorporate protection of tidal and non-tidal wetlands and fragile natural areas in their land-use planning, water and sewer planning, construction and other growth-related management processes.

The Bay Agreement officially recognizes for the first time the clear correlation between population growth and associated development and the environmental degradation in the Chesapeake Bay system. The Bay community has now recognized that enhancing, or even maintaining, the quality of the Bay while accommodating growth will require difficult choices and decisions and will involve continued and enhanced commitment to proper development standards.

It is universally agreed that action to better mitigate the impacts of growth must be taken swiftly and effectively, or the impacts of growth could eclipse the efforts we have already made to improve the Bay's water quality.

The commitments included in this section of the Agreement, and the actions which have been taken to date to fulfill those commitments are addressed in detail in Chapter VII of this Annual Report.

## Public Information, Education and Participation

The 1987 Chesapeake Bay Agreement commits the signatories:

- to conduct coordinated education and information programs to inform all concerned parties of their roles, responsibilities and opportunities in the restoration and protection effort and to promote public involvement in the management and decision-making process;
- to provide for public review and comment on all implementation plans developed pursuant to the Agreement;
- by March 1988, to develop state and federal communication plans for public information, education and participation, and by May 1988, to develop a unified, Bay-wide communication plan;
- to promote Chesapeake Bay restoration efforts by establishing an annual Bay-wide series of Chesapeake Bay Watershed Awareness events, to include a Governor's Cup Fishing Tournament.

Each of these commitments is obviously ongoing in nature and activities pursuant to the commitments are well underway. Personnel in each of the jurisdictions have been designated as information officers or contacts to facilitate the dissemination of Bay-related information to the concerned public. The Bay-wide communication plan is directed out of the Chesapeake Bay Liaison Office in Annapolis in cooperation with each of the signatories. In addition, the Alliance for the Chesapeake Bay receives funding from the Environmental Protection Agency

*In order to guarantee public support for the Bay restoration campaign, our citizens must know, understand and even love the Bay. They must take pride in the extraordinary resource they have.*

as a part of the Chesapeake Bay Program to conduct meetings, workshops, public hearings and other forums designed to increase public awareness and involvement. The Chesapeake Regional Information Service (CRIS) also maintains a toll-free information number (1-800-662-CRIS) to assist the general public in obtaining information about the Bay and its resources.

The Governor's Cup Fishing Tournaments were held with great success in the late summer of 1988 and 1989. In 1989, the tournaments were held simultaneously at several locations throughout the Bay. Activities such as Chesapeake Appreciation Days and BayFest in Maryland and Harbor Fest in Virginia are being publicized through the Bay-wide communications office, among others, and Governor Schaefer has launched a "One Million Marylanders for the Bay" campaign to involve citizens throughout the state in the clean-up effort.

## Public Access

The 1987 Chesapeake Bay Agreement commits the signatories:

- to intensify efforts to improve and expand public access opportunities being made available through federal, state and local governments, which includes an inventory of current access opportunities by July 1988, which targets state and federal actions to secure additional tidal shorefront acres by December 1990;
- by December 1988, to prepare a comprehensive guide to access facilities and the natural resource system for the tidal Chesapeake Bay.

Though the access commitments refer specifically to the "tidal" waters and shorefronts of the Bay, Pennsylvania expressed an early interest in the inventory and mapping of access sites along the Susquehanna River and the concept of the guide was expanded to accommodate that interest. Early in 1989, the Public Access Task Force Team published the Bay and River Public Access Guide, a comprehensive guide depicting publicly owned access sites along the Chesapeake Bay and its tributaries, including the Susquehanna River. In addition to the detailed location maps, the guide includes useful information about the Bay and its environs and site-specific facts such as the facilities which are available, whether a permit or fee is required and seasonal or temporal restrictions. It is anticipated that future editions of the guide might be expanded to include privately-owned access sites.

In September of 1989, the Public Access Commitment Team members from the District of Columbia, Maryland, Pennsylvania and Virginia met to discuss Phase II of the Public Access Strategy. Phase II involves the preparation of a plan for additional Chesapeake Bay and river access. The work program involves an inventory of data, a summary of existing conditions, a needs assessment and establishment of criteria for the development of future Bay and river access, public involvement processes, and the preparation of the planning report. The planning report, which will initiate active implementation of Phase 2, is scheduled for distribution in December 1990.

Land acquisition programs such as Program Open Space in Maryland and inventory programs such as the Virginia Natural Heritage Program will be particularly useful in identifying and targeting shorefront lands for future acquisition and/or management. The question of public access will remain a difficult and ambiguous one: a strong public commitment will require enhanced opportunities for access to the shores and waters of the Bay, yet increased access will also accelerate the deleterious anthropogenic impacts which we inflict upon the waterway.

## Governance

Commitments under the heading of Governance in the Bay Agreement cover a broad array of issues dealing with the overall administrative structure and function of the Chesapeake Bay Program. They are not as product-oriented as some of the other focus areas of the Agreement. As such, their implementation is ongoing. Specific commitments include the following:

- to develop an annual Chesapeake Bay work plan to be endorsed by the Chesapeake Executive Council;
- to continue to support Bay-wide environmental monitoring and research to provide the technical and scientific information necessary to support management decisions;
- to strengthen the Chesapeake Bay Liaison Office by assigning, as appropriate, staff persons from the signatories to assist with the technical support functions of that office;
- by July 1988, to develop and adopt a comprehensive research plan to be evaluated and updated annually to address the technical needs of the Chesapeake Bay Program;
- by July 1988, to develop a Bay-wide monitoring plan for selected commercially, recreationally and ecologically valuable species;
- by March 1988, to establish a local government advisory committee to the Chesapeake Executive Council and charge the committee to develop a strategy for local government participation in the Bay program;
- to consider and review the feasibility of establishing an independent Chesapeake Bay Executive Board;
- by July 1988, the Environmental Protection Agency will develop a coordinated federal agency workplan which identifies specific federal programs to be integrated into a coordinated federal effort to support the restoration of the Chesapeake Bay.

Planning for a coordinated Bay-wide monitoring program for both water quality and living resources is well underway. Water quality monitoring programs in Maryland and Virginia have been somewhat standardized and consistent for a number of years but living resource monitoring efforts have been characterized by seasonal and methodological variations. The states, in conjunction with several Subcommittees of the Bay Program are currently attempting to develop consistent, comparable and scientifically valid sampling programs and schedules which can be used in a Bay-wide monitoring effort.

The Local Government Advisory Committee (LGAC), formed shortly after the signing of the Bay Agreement, consists of 20 members representing local governments from each of the signatory jurisdictions. The Committee has, quite naturally, focused its attentions on issues of concern to local governments such as infrastructure funding, development standards and immediate response to hazardous substance spills. As the states begin to implement some of the Population Growth and Development commitments and attempt to develop growth management strategies, it is expected that the Local Government Advisory Committee will play an increasingly important role.

Local governments in the Bay watershed range from the very rural, sparsely populated and undeveloped counties such as Dorchester, Maryland, and Fluvanna, Virginia, to the very sophisticated and urbanized, densely populated cities such as Baltimore, Harrisburg and Norfolk. For this reason, it is not possible to describe a single or "best" policy which should be pursued by local governments. However, with programs such as Virginia's Chesapeake Bay Preservation Act and Maryland's Critical Area Act in place, it is clear that local jurisdictions will be called upon to bear much of the burden in terms of developing and implementing environmentally sound land use regulations and programs.

*Local governments are a key player in the clean-up effort. It is clear that they will be called upon to bear much of the burden ...*

The Chesapeake Bay Program and the signatories to the Chesapeake Bay Agreement are firmly committed to ensuring that local governments are considered an integral component of the efforts to protect and restore the Chesapeake and that these jurisdictions are provided the necessary resources to fulfill their commitments to the Bay.

A federal agency workplan, developed under the direction of the United States Environmental Protection Agency, has been approved by the Chesapeake Executive Council. The U.S. Navy, the U.S. Coast Guard and other agencies of the federal government have designated personnel to serve specifically as contact points or liaisons between their agencies and the Bay Program.

The 1987 Chesapeake Bay Agreement, then, has provided the Bay community not only with a short-term "action agenda", but also with a wide range of long-term goals and objectives. The Bay jurisdictions are no longer required to develop and evaluate programs in a vacuum. The Agreement includes clear and specific goals to which each of the signatories are committed, both individually and collectively. The Chesapeake Bay Agreement, and the readjustments in program direction and priorities which will be called for in the 1991 and subsequent reassessments, should provide the framework for the Chesapeake Bay restoration and protection program well into the twenty-first century. As we proceed, all of the signatory parties look to the Chesapeake Bay Commission for the legislative fine-tuning and budgetary support that will be needed to ensure a strong commitment and consistency among the jurisdictions involved.

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## Chapter VI

# NON-TIDAL WETLANDS

### Introduction and Background

During 1988 and 1989, the Chesapeake Bay Commission devoted a great deal of attention to the issue of non-tidal wetlands protection throughout the Bay watershed. Maryland and Virginia have had successful tidal wetlands protection programs in place since the early 1970's. To date, inland non-tidal wetlands have not been afforded the same degree of attention or protection. The leaders of the Chesapeake Bay clean-up program recognized this shortfall and agreed to rectify the problem. Because of the legislative attention required to improve protection efforts, the Chesapeake Bay Commission played an important role in the process.

The 1987 Chesapeake Bay Agreement specifically calls for the development of programs to improve the protection of non-tidal wetlands. Under the Living Resources commitments, the signatories agreed to develop, by December 1988, a Bay-wide policy for the protection of tidal and non-tidal wetlands. Within the context of the Population Growth and Development commitments, the signatories are charged with providing incentives, technical assistance and guidance to local governments to actively encourage them to incorporate the protection of tidal and non-tidal wetlands and other fragile areas into the growth-related management process. Both of these commitments have been met and are currently being implemented. The Bay-wide wetlands policy is among the strongest regional policies in the nation, calling for an overall net gain in the wetlands resources in the watershed.

The Chesapeake Bay Wetlands Policy requires that implementation plans for policy recommendations be adopted by June, 1990. In response to that commitment, representatives from the public and private sector involved in the implementation of the wetlands policy have been working throughout 1989 on the "Chesapeake Bay Wetlands Policy Implementation Plan."

The Plan addresses issues relating to inventorying and mapping wetlands, protecting existing wetlands, rehabilitating, restoring and creating wetlands, education and research. The Plan is designed to enhance wetlands protection by addressing current problems and avoiding problems in the future. The implementation plan is now in draft form and is scheduled to be distributed for public review in March 1990.

### The Importance of the Non-tidal Wetlands Resource in the Bay Watershed

Historically, wetlands and marshes have been viewed by many as unsightly nuisances serving primarily as breeding grounds for snakes and mosquitoes. Their importance to wildlife, water quality and flood control was largely unappreciated, if not ignored. They were, instead, regarded as areas of minimal utility ideally suited for bulkheading, dredging, draining and filling to create housing developments, industrial sites, marginally productive agricultural lands, waterfront property and even public landfills. Wetlands were used for these purposes with little concern for or knowledge of their impact on broader water resource systems.

Fortunately, this "wetlands as wastelands" philosophy has largely been replaced by a more enlightened view of wetlands as one of the most diverse and productive ecosystems on earth. In the Chesapeake Bay watershed, we are beginning to

*In June of 1987, the Chesapeake Bay Wetlands System received world recognition by being nominated for listing as "Wetlands of International Importance as Waterfowl Habitat" under a 45-nation treaty.*



*Fortunately, this "wetlands as wastelands" philosophy has largely been replaced by a more enlightened view of wetlands as one of the most diverse and productive ecosystems on earth.*

recognize wetlands as vital to the well-being of the estuary and its living resources. They are now recognized as important natural resources not only to citizens living in close proximity to them, but also to others living outside the region who consume or utilize products produced within or dependent upon them.

If left undisturbed, the wetlands of the Chesapeake—those marshes, mudflats, swamps and bogs lying at the interface of the land and water—play an important role in the maintenance of surface water quality and the provision of extraordinarily diverse fish and wildlife habitat. Wetlands provide a myriad of benefits to the ecosystem, including, among others:

- habitat for waterfowl and other wildlife
- pollution control
- flood damage protection
- erosion control
- natural products for human use
- food production and aquatic productivity
- habitat for rare and endangered species
- recreation and aesthetics
- water supply
- education and research

## **Status and Recent Trends of Wetlands in the Watershed**

In June of 1987, the Chesapeake Bay Wetlands System received world-wide recognition by being nominated for listing as "Wetlands of International Importance Especially as Waterfowl Habitat" under a 45-nation treaty. The Chesapeake Bay wetlands system was represented as one of the most important wetland areas in the United States because of its value as habitat for endangered species and more than a million waterfowl, and for finfish and shellfish productivity, recreation, and commerce. This priceless resource, however, is being gradually destroyed through man-initiated and natural forces and the current legal and regulatory structure is inadequate to stem the destruction.

The most recent comprehensive information on the current status and recent trends in wetlands for the five-state Mid-Atlantic region is found in a study conducted jointly by the U.S. Fish and Wildlife Service and the Environmental Protection Agency as one element of the National Wetlands Inventory. Using a statistical sampling design, researchers determined wetlands changes for the region between the mid-1950's and the late 1970's. The five-state region had slightly more than two million acres of wetlands in the late 1970's, with approximately 1.2 million acres of these being located within the Chesapeake Bay drainage area. More than 75% of these wetlands are inland wetlands and about 20% are coastal wetlands.

Between the mid-1950's and the late 1970's, the region experienced net losses in its most important wetland types (estuarine and palustrine vegetated wetlands) and substantial net gains in ponds and larger water bodies (lakes and reservoirs). Inland vegetated wetlands suffered the greatest net losses during the period, amounting to almost 133,000 acres, or about seven percent of wetlands which were present in the mid-1950's. Agricultural conversion of these wetlands and associated channelization projects were the major reasons for the declines, accounting for nearly 60% of the losses.

Unfortunately, many of man's activities may be physically and/or functionally destructive to wetlands. Some actions do, however, create wetlands. Construc-

tion of farm ponds in upland areas, for instance, may increase wetlands acreage. Restoration of previously drained wetlands can also be beneficial. The major man-induced causes of non-tidal wetlands change in the Chesapeake Bay watershed are as follows:

1. Agriculture - draining and clearing wetlands for crop production;
2. Pond and lake construction - impounding or excavating and flooding wetlands for water supply, flood protection, recreation, and other purposes;
3. Urban development - filling wetlands for housing construction, industrial facilities, ports, commercial development, highways, waste disposal sites, airports, and other purposes;
4. Other development - primarily dredging or channelizing wetlands for navigation and flood protection which often facilitates timber harvest, or wetland conversion to farmland and urban uses; silviculture; peat, coal, sand and gravel mining; and altering natural drainage patterns;
5. Pollution - degrading the quality of wetlands by direct or indirect discharge of various materials including pesticides, herbicides, other chemicals, sediment, domestic sewage, and agricultural wastes.

In addition to these man-induced changes, nature also plays a significant role in changing the abundance, function and distribution of wetlands. Natural forces such as the subsidence of coastal areas related to rising sea level, erosion and accretion, natural succession from one wetland type to another, droughts and other climatic variables can all contribute to the changing character of our wetlands resource. In some cases these events can be managed and their impacts ameliorated, but they cannot be controlled in any absolute sense. These natural forces, however, are constantly fluctuating and tend to equalize one another over time; they do not contribute significantly to the overall resource loss. The activities of man, on the other hand, have continued without redress, resulting in a cumulative and accelerating loss of this valuable and finite resource.

## Recent State and Regional Actions Concerning Non-Tidal Wetlands Protection

The heightened visibility and awareness of the issue of non-tidal wetlands protection in the Bay watershed over the past several years have generated a great deal of activity in each of the Bay states and by the Chesapeake Bay Commission. The Commission, and many other groups, have long advocated the development of appropriate protection and enhancement programs for inland non-tidal wetlands. It appears that such action is now being taken in the Chesapeake region.

Prior to 1987, the dominant force in the non-tidal wetlands regulatory framework was the federal government. The history of federal involvement in the wetlands regulatory scheme has been long and controversial and areas of responsibility and authority have frequently been obscure from the perspective of the states. Section 404 of the Federal Water Pollution Control Act of 1972 requires that permits be obtained from the U.S. Army Corps of Engineers for the discharge of dredged and fill materials into the "waters of the United States". The judiciary has consistently and significantly broadened the interpretation of "waters of the United States" to include adjacent wetlands and other inter-related components of the ecosystem.

The U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service all have varying degrees of input to the decision-making process regarding wetlands. Until quite recently, there has

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*In the past 30 years, losses to our coastal and inland wetlands have averaged more than 2,800 acres per year.*

been difficulty in ensuring coordination among these agencies and between the federal and state governments. The resultant uncertainties in terms of jurisdiction and authority have provided additional impetus for the states to consider development of their own wetlands protection programs. The level of coordination among federal agencies appears, however, to have improved markedly over the past two years.

Because of the extraordinary level of interest and activity in each of the states concerning the protection of the watershed's remaining non-tidal wetlands resources, and in direct response to the commitments in the 1987 Chesapeake Bay Agreement, the Chesapeake Bay Commission determined that non-tidal wetlands protective measures should receive priority tri-state attention during 1988 and 1989.

The Chesapeake Bay Commission published two major white papers during 1988 in furtherance of the agreed-upon Bay-wide goals and to assist in facilitating the deliberations concerning this issue in each of the jurisdictions. "Non-Tidal Wetlands Protection Programs for the Chesapeake Bay Region: A Review and Comparison" was prepared at the request of the Commission and published in September, 1988. It provides an overview of significant issues related to wetlands protection, summarizes the status and recent trends of the resource within the watershed and provides, in matrix form, a comparison of existing protection programs in the states of Maryland, Virginia, Pennsylvania and Delaware. Discussion of the federal regulatory program is also included, as are staff recommendations for an effective regulatory program.

The document was reviewed and discussed by the Commission at its September meeting. That review resulted in the publication of a subsequent document entitled "The Development of Effective State Non-Tidal Wetlands Protection Programs: Position Statement". This policy paper outlines the elements which should be considered integral to legislation designed to protect the non-tidal wetland resources of the region, and includes appropriate recommendations concerning the need for compatibility among the states of Maryland, Virginia and Pennsylvania. Because the Bay states were in similar but varying postures of evaluating existing and proposed programs, the Commission considered that it had a unique and timely opportunity to ensure that its member states proceeded in a coordinated fashion to adopt, whenever appropriate and feasible, compatible programs reflecting the Baywide nature of and concern for the non-tidal wetlands resources of the region.

The Position Statement was extensively reviewed and edited and was unanimously adopted by the Commission at its November meeting. Both white papers were widely distributed throughout the legislative community of the three jurisdictions as well as to the Bay community at large. In addition to the Baywide efforts, each of the member states has taken positive action to develop a non-tidal wetlands protection program.

At least partially in response to the signing of the 1987 Chesapeake Bay Agreement, a non-tidal wetlands statute was drafted and introduced during the 1988 Session of the Virginia General Assembly. The bill was heavily amended and eventually carried over for re-consideration during the 1989 legislative session. The General Assembly debated the issue in 1989 and decided to convene, under the auspices of the Chesapeake Bay Commission, a Non-Tidal Wetlands Roundtable to further examine the issue and report its recommendations to the General Assembly in 1990. The Roundtable consisted of twenty members appointed by the leadership of the General Assembly. Membership included legislators as well as various other affected and interested user groups, including representatives from the agricultural, development and environmental communities. Deliberations of the group were facilitated by the Institute for Environmental Negotiation of the University of Virginia and were assisted by a Resource Group chosen for its expertise in wetlands-related issues. Commission members and staff were well represented on the Roundtable group.

The Roundtable completed its deliberations in late 1989 and a report was released early in 1990. The recommendations of the group include strengthening existing state and federal programs, surveying existing programs to determine their potential impact on the wetlands resource, and the development of a state policy for the protection of non-tidal wetlands. Legislative options are also under consideration.

In addition to the creation of the Roundtable, Virginia in 1989 appropriated additional funds and positions to strengthen the wetlands and water quality components of existing programs such as the 401 Water Quality Certification process administered by the State Water Control Board. Resources were also appropriated to ensure that an accurate inventory of wetlands resources within the Commonwealth is completed in a timely fashion.

In Maryland, a Non-tidal Wetlands Task Force was created in 1987 in order to assist the State in the development of a policy and/or draft legislation by the end of June, 1988. The Task Force included local government representatives, state legislators, regulatory officials, developers, environmentalists, farmers and foresters. The deliberations of the Task Force resulted in the publication of a draft document entitled "Elements for Possible Inclusion in a Non-tidal Wetlands Statute". That document was reviewed by the Office of the Governor with the intent of developing a major Administration-sponsored legislative initiative for consideration by the 1989 General Assembly. Such legislation was developed and adopted by the Maryland General Assembly in 1989 as the Maryland Non-tidal Wetlands Protection Act.

The Act was highly controversial and heavily debated during the legislative session. Through compromise and cooperation, however, the legislation was enacted by overwhelming majorities in both the House and the Senate, and was signed into law by the Governor in May of 1989. The goal of the Act is to attain no net overall loss and to strive for a net resource gain in non-tidal wetland acreage and function over present conditions.

Overall administration of the program lies in the Department of Natural Resources, though provisions are included for the delegation of Departmental authority to local governments that enact a program meeting the state's minimum standards by December 31, 1990. The Department is required to develop regulations and guidance maps by December 31, 1989 and to present them to the General Assembly on the first day of the 1990 legislative session. The regulations may not take effect until March 15, 1990, following review and approval by the legislature. The program is a strong and ambitious one and its effectiveness will depend largely on the strength of the implementing regulations and of strict enforcement.

In Pennsylvania, wetlands protective measures are authorized within the broader regulatory framework provided through the 1978 Dam Safety and Encroachments Act. The Act regulates certain defined fill activities and encroachments into the waters of the state. "Waters of the state" has been construed to include wetlands. During much of 1988, the Pennsylvania Department of Environmental Resources was involved in the conduct of a study to refine and strengthen the Commonwealth's wetlands protection policy. The study resulted in the development of draft wetlands protection guidelines which clarify state policy, define those wetlands areas which are deemed to be of "exceptional value" deserving of special protection, and generally strengthen the state regulatory program. It is anticipated that these guidelines, when finalized, will be incorporated into state law.

*The Chesapeake Bay Commission, and many other groups, have long advocated the development of appropriate protection and enhancement programs for inland, non-tidal wetlands on a State-wide basis.*



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## Chapter VII

# POPULATION GROWTH and DEVELOPMENT

One of the most significant aspects of the 1987 Chesapeake Bay Agreement is the fact that it addresses, for the first time, the Bay-wide concerns over issues related to population growth trends and land use patterns. These are issues which have been of concern to the Chesapeake Bay Commission for a number of years and the Commission was instrumental in ensuring that they were recognized by the signatories to the Bay Agreement. The declines in water quality and living resources productivity which have occurred coincident with increased growth and population in the Chesapeake Bay drainage basin over the past thirty years have been well documented. There is, quite simply, no more important or more controlling issue which will gauge our commitment to the Chesapeake Bay as we approach and enter the twenty-first century.

For the Chesapeake Bay states, population growth appears inevitable. Population projections tell us that each of the three Bay states, whether on a regional or on a statewide scale, will be facing serious growth and development challenges - with accompanying environmental implications - in the three decades to come. The region's promise of economic vitality as well as its natural splendor and cultural resources have made the Chesapeake basin one of the most attractive and dynamic places in the country to live and work.

But rapid growth appears to be the price for all this boon and beauty. By the year 2020, the population within the watershed is expected to grow by 2.6 million new residents, a 20 percent increase over our current population. That growth could have a tremendous impact upon our quality of life and environment if not managed correctly. In fact, it is highly unlikely that the roads, sewers and other public facilities needed to fully support growth could be built if growth continues in present patterns and densities. How the region effectively absorbs this population increase is one of the great challenges facing the political leadership of our region. The Chesapeake Bay Commission believes it to be a key to the success of the Bay restoration and protection program.

Issues of land use, population growth and development have been a major focus of discussion and examination for the Chesapeake Bay Commission during the past two years. Both the January, 1989 and the November, 1989 quarterly meetings focused largely on growth-related issues. In addition, both the 1988 Chairman, Delegate W. Tayloe Murphy, Jr. (VA), and the 1989 Chairman, Delegate James E. McClellan (MD), focused on growth issues in their annual presentations to the Chesapeake Executive Council. Still, dialogues in this area are just beginning as the Commission members work to untangle the complex web that governs and directs the use of our landscape and the physical accommodation of our population. Over time, the Commission hopes to participate in a modification of the way we consume land, the way we manage land, and the way we direct growth in our region.

The Commission members believe that we, as a Bay community, must address growth issues now. If we do not, all of our efforts to protect water quality and living resources through other programs may be eclipsed by the tremendous growth and changing land use patterns in the Bay watershed.

During 1988/1989 the Commission began to systematically explore the issues that contribute to our growth problems. It examined land use patterns, population projections, environmental implications of growth, infrastructure planning and more. The past two years have been among the most active in this area, not only for the Commission members, but for the Bay community in general. These activities appear to be laying the groundwork for some major changes in the way

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*For the Chesapeake Bay states, population growth appears inevitable. How the region effectively absorbs this population increase is one of the great challenges facing the political leadership of our region.*

we attempt to direct growth in the Bay states. We are beginning to see the emergence of a new way of thinking - a new way to manage and direct growth. It appears that Statewide programs to better manage our growth, involving State, regional and local government, will soon come of age.

A summary of the Commission's activities concerning growth issues follows. The chronology lays out a clear direction toward change.

## **THE 1987 CHESAPEAKE BAY AGREEMENT**

The 1987 Chesapeake Bay Agreement reflects a recognition on the part of the Chesapeake Bay Program's political leadership that population growth and development in the watershed must be addressed. The Agreement includes, in addition to the more traditional chapters on living resources, water quality and education, a section that focuses exclusively on population growth and development issues.

As a springboard for action, the Agreement laid out a series of commitments that representatives from each signatory were asked to address. Timeframes for examination and strategy development were often tight, reflecting a sense of urgency for the region. As a signatory, Chesapeake Bay Commission members and staff participated in each of the projects described below.

## **THE YEAR 2020 PANEL**

The Year 2020 Panel was composed of members appointed by each of the governors in the tri-state Chesapeake basin, by the Mayor of the District of Columbia, by the Environmental Protection Agency and by the Chesapeake Bay Commission. Membership included developers, university faculty members, business people, federal and local government officials and a legislator. The Chesapeake Bay Commission appointed Delegate W. Tayloe Murphy, Jr. of Virginia to represent the legislative interests on the Panel. Delegate Murphy, who served as Chairman of the Commission in 1988, has a long involvement in growth management issues, including his sponsorship of the Chesapeake Bay Preservation Act of 1988.

Over the course of its nine months of deliberation, the Panel carefully reviewed the consequences of the projected growth for the watershed. To form its conclusions, the Panel reviewed the problems of the Bay, current growth patterns, and growth scenarios for the future. In addition, the members conducted four open hearings in each state and the District of Columbia to hear citizen views.

The Panel's findings and recommendations were released in a report which was delivered to the Chesapeake Executive Council on January 5, 1989. The Panel's report details the consequences of unmanaged growth and development, given the anticipated population increase of 2.6 million people within the Bay basin by the year 2020, and suggests actions to protect the future of the Bay region. The magnitude and geographical distribution of this projected growth are summarized in the table below.

**POPULATION CHANGE BY JURISDICTION  
1990 - 2020**

	1990	Projected New Residents 2020	Increase by 2020 (percent)	Percent of Watershed Increase
Pennsylvania	3,570,700	283,800	8	11
Maryland	4,666,200	830,400	18	32
Virginia	4,726,000	1,503,800	32	57
Washington, D.C.	<u>628,300</u>	<u>-600</u>	<u>-</u>	<u>-</u>
	13,591,200	2,617,400	20%	100%

The Panel's report called for new initiatives to better balance economic development with increased protection of the Bay region's natural and cultural resources. The report presented these initiatives in a series of Visions and Actions that would force efficient land development patterns. Summarized, these visions include:

**VISION I:** Development is concentrated in suitable areas;

**VISION II:** Sensitive areas are protected;

**VISION III:** Growth is directed to existing population centers in rural areas and resource areas are protected;

**VISION IV:** Stewardship of the Bay and the land is a universal ethic;

**VISION V:** Conservation of resources, including a reduction in resource consumption, is practiced throughout the region;

**VISION VI:** Funding mechanisms are in place to achieve all other visions.

Central to the Panel's recommendations were Visions I and III, calling for growth to be concentrated in areas that are currently populated and in areas near employment centers to take advantage of the existing or projected infrastructure. These areas, designated as "mixed use growth centers" by the Panel, would absorb and concentrate growth. More rural and environmentally sensitive areas would be protected and retain their rural character.

The report also discourages the widespread development of large lot, single family detached home communities. Noted the Panel, "more than any single development factor, we were concerned with low density sprawl. . .the low density alternative produces environmental effects and infrastructure demands that are more expensive to remedy. . ."

The Panel conceded that the problems threatening the Bay are multifaceted. Many, it declared, are global in nature, such as acid rain, global warming and the rising level of the Bay itself.

Some, also, are consequences of what is happening to and in the watershed itself. The Panel pointed to the excessive levels of nutrients and heavy metals entering the Bay as a major problem for the estuary. Another category of problems are due to industrial pollution, agricultural runoff, and sewage discharge which have led to oxygen depletion and toxicity in the Bay.

The Panel stated, however, that while these problems will be compounded by the increase in population expected by the year 2020, they are by no means caused by growth alone. Pollution to the Bay can be reduced even if more people continue to move and live within the Bay's watershed, but only if rational growth patterns are adopted, the Panel concluded. The solutions to these problems, ac-

*The Commission members believe that we, as a Bay community, must address growth issues now. If we do not, all of our efforts to protect water quality and living resources through other programs may be eclipsed by the tremendous growth and changing land use patterns in the Bay watershed.*



*"The Panel was impressed with projections showing 2.6 million new residents in the region by the year 2020. This 20% growth in population could change extensive areas to developed uses."*

*Year 2020 Report, December 1988*

cording to the Panel, rely on linking actions through land use planning, infrastructure strategies, waste disposal and lifestyle.

In accepting the Year 2020 Report in January, 1989, the Executive Council asked the Panel to recommend priorities among the steps to be taken and to offer "realistic, but still challenging, ambitious deadlines" for action. In essence, the signatories were asking for even more specific direction and a refining of the Panel's recommendations.

The Panel responded with a follow-up report in June of 1989 that included three recommendations "central to achieving our visions". These recommendations called upon each jurisdiction in the watershed to:

1. Establish a commission or agency charged with the responsibility of translating the Panel's recommendations into actions. This group would recommend a structured process by which all levels of government can plan for and manage growth together, and through which the public and private sectors can work to achieve our goals;
2. Develop state and regional planning processes and systems for coordinating public investment in highways, sewers, and other infrastructure elements that affect growth. These could include developing a State Comprehensive Infrastructure and Development Plan, defining growth and resource protection areas, and mapping environmentally sensitive areas;
3. Undertake an educational initiative to promote greater understanding of threats to Chesapeake Bay and to the environment generally deriving from projected growth.

In a resolution, adopted November 16, 1989, the Chesapeake Bay Commission formally endorsed the Panel's three priority recommendations. The Commission followed up with this commitment when 1989 Chairman Delegate James E. McClellan urged all members of the Chesapeake Executive Council to do the same. McClellan summed up the Commission's convictions by stressing that "these three actions are crucial to achieving all of the Panel's visions."

Both Maryland and Virginia have established special commissions to explore the environmental ramifications of projected growth and to formulate recommendations for State action. Acting on its commitment to resolving issues of growth, Commission members and staff are extremely active in these State "2020 Commissions". In Pennsylvania, the Chesapeake Bay Coordinating Committee has the responsibility for reviewing 2020 Panel recommendations and suggesting opportunities for state action.

## **Maryland Governor's Commission on Growth in the Chesapeake Bay Region**

In response to the recommendations of the Year 2020 Panel, Maryland Governor Schaefer appointed 18 Maryland citizens in October 1989 to make up the "Governor's Commission on Growth in the Chesapeake Bay Region". Representing a broad spectrum of groups and organizations, the Maryland Commission has been charged with preparing specific recommendations for the management of growth and environmental resources in Maryland through the year 2020. Chesapeake Bay Commission members Senator Bernie Fowler and Delegate Ronald A. Guns were chosen as the legislative representatives to serve on the Commission. The Commission's Executive Director, Ann Pesiri Swanson, was asked to serve as a member of the Senior Council to the Growth Commission.

This Commission was launched using the Panel's seven Visions as a springboard. The Governor announced that he had accepted the Visions presented by the

Panel and that it was now the work of the Commission to determine the appropriate actions that would allow Maryland to reach those visions.

Specifically, the Growth Commission, which is being staffed by the State Office of Planning, has been asked to:

- Review the findings of the Year 2020 Panel and evaluate their application to Maryland;
- Prepare a comprehensive listing of growth issues the state must address to the year 2020;
- Develop specific recommendations and an action agenda outlining steps Maryland must take to provide for a healthy economy and to improve the environmental quality of the Bay.

The Commission intends to complete the tasks in about a year. At its initial meeting in late October the Commission planned a four-month series of semi-monthly meetings beginning in November. Public hearings were also scheduled for early Spring of 1990. A draft report is expected to be prepared by late fall.

## Virginia Commission on Population Growth and Development

Immediately following the release of the Year 2020 Panel Report, Delegate W. Tayloe Murphy, Jr. introduced House Joint Resolution 435 calling for the establishment of a statewide Commission on Population Growth and Development. The General Assembly endorsed the measure, and in the early summer of 1989, the "Murphy Commission" got underway. Charged with recommending a process for statewide planning for population growth and development to the Year 2020, the Commission is to report to the 1990 session of the legislature.

The Commission is composed of 19 members representing the diverse population of the state including development and real estate, local government, business, conservation, academia, and legislative interests. Membership included seven legislative members: Delegate W. Tayloe Murphy, Jr. (chairman), Senator Joseph V. Gartlan, Jr. (vice-chairman), Senator Robert L. Calhoun, Delegate Whittington W. Clement, Senator Elmo G. Cross, Delegate Mary A. Marshall and Delegate John Watkins.

The Commission met in open sessions in Richmond once a month from July through September, 1989. At these meetings, the Commission heard from representatives of state agencies, local governments, and other organizations on such issues as population growth, water resources, transportation, waste management, land use and intergovernmental relations. In October, the Commission met for an overnight retreat to determine the direction that it wished to pursue. The final meeting of the Commission was in Richmond in late November.

The final report of the Commission will be delivered to the Virginia legislature in the early days of the 1990 General Assembly session. It is expected that the Commission will recommend the creation by the legislature of an expanded statutory Commission on Population Growth and Development to continue its work and to make recommendations for legislation. A statutory commission will provide stability to a delicate process that must be sensitive to regional differences, respectful of all levels of government and which must reach a broad consensus. The Commission is expected to request that funds be allocated that would provide for full-time staffing for the Commission.

*"Procedures currently being used throughout the Bay region for managing and providing for growth and development are inadequate ..."*

*Year 2020 Report, December 1988*

*"States must take a much more active and central role in the planning process ... a Comprehensive Development and Infrastructure Plan must be put in place."*

*Year 2020 Report, December 1988*

## **Pennsylvania Interdepartmental Chesapeake Bay Coordinating Committee**

Pennsylvania's Chesapeake Bay Interdepartmental Coordinating Committee, which is reviewing the Year 2020 recommendations, includes representatives of twelve state agencies and two intergovernmental agencies. Agency recommendations will be considered in the course of state budget deliberations. The Pennsylvania legislature also re-established the State Planning Board in July 1989 to consider statewide planning issues, collect data and offer recommendations in the form of strategic plans.

### **DEVELOPMENT POLICIES AND GUIDELINES**

The goal of the Population Growth and Development section of the 1987 Chesapeake Bay Agreement is to: "Plan for and manage the adverse environmental effects of human population growth and land development in the Chesapeake Bay Watershed." The Development Policies and Guidelines are a response to this commitment.

Population projections prepared by Pennsylvania, Maryland, Virginia and the District of Columbia indicate that the Chesapeake Bay watershed will experience a 20 percent population increase in the next 30 years, amounting to more than 2.6 million new residents. The majority of this population will settle in areas on or near the Bay or its more important tributaries and their sub-basins.

The provision of housing, places to work and shop, and the water, waste treatment, roads, power and landfills to support this growth will bring enormous change to the landscape and, unless managed adequately, pose extremely negative environmental consequences. For both environmental and economic reasons, we must build on what is already in place before disturbing new land. When new areas are developed, development must be undertaken with much greater efficiency and forethought than is reflected in our present practices.

It is on these premises that the Development Policies and Guidelines (DP & G) were produced. The DP & G are intended to apply to government projects to ensure that development activities undertaken or financially supported by government will serve as models for the region. As envisioned, they will be applied throughout the Chesapeake Bay watershed and will be considered by state and federal regulatory agencies in their decision making, as they are able under existing law.

Much of the energy during 1988/1989 was devoted to the preparation of the DP & G. The full force of the guidelines will be incorporated into State projects in 1990. Virginia's Council on the Environment is working toward incorporating the DP & G in environmental impact statement reviews. Virginia has distributed the document to all state agencies and strategies to tie the guidelines more closely to the state development process are planned.

Much remains to be done concerning the implementation of these Development Policies and Guidelines. The Chesapeake Bay Commission is expected to review the implementation procedures of each of the states to ensure that the commitment to make our state development activities model projects is met.

### **INCENTIVES AND TECHNICAL ASSISTANCE**

The Population Growth and Development Section of the 1987 Chesapeake Bay Agreement recognizes the clear relationship between land use activities and Bay water quality. Furthermore, the Agreement acknowledges the role that local governments properly play in day-to-day development decisions which ultimately, either directly or indirectly, affect the Chesapeake Bay's water quality and habitat.

The Agreement called for the development of a strategy to provide incentives, technical assistance and guidance to local governments to actively encourage them to incorporate protection of tidal and non-tidal wetlands and fragile natural areas in their land use planning, water and sewer planning, construction and other growth-related management processes.

The "Technical Assistance and Incentives" document includes a discussion of fragile natural areas, the ways in which governments can help to protect them, and a matrix showing existing technical assistance and incentive programs which can be used to assist local governments. In addition, it outlines a strategy for developing a more complete, integrated set of technical assistance programs within each of the jurisdictions during 1989/1990.

In follow-up action, each state is now developing a guide covering all financial and technical assistance programs of the state. Both Pennsylvania and Virginia have opted to include programs offered by non-profit organizations.

The Chesapeake Bay Commission initiated a project with the Pennsylvania Chesapeake Bay Education Office to produce in 1990 a slide/video presentation for local officials demonstrating best management practices applicable to development projects. Likewise, Maryland's Office of Planning is working in concert with the Maryland Citizen Planners Association on a video tape demonstrating design techniques to achieve higher densities in residential developments while preserving surrounding open space.

## **EXISTING STATE LAND USE PROGRAMS**

Both Maryland and Virginia have programs currently in place that provide a regulatory basis for protecting sensitive Bay and tidal tributary shorelines from adverse environmental impacts. These programs must effectively mesh with the new proposals that are expected to come out of the state Growth Commissions.

### **Implementation of Maryland's Critical Area Programs**

The Chesapeake Bay Critical Area Commission, and the protection program that it was charged to develop for the Critical Area, was created by law in 1984. The law delineated the land immediately adjacent to the Bay (i.e., Critical Area) as having the greatest potential for maintaining and enhancing water quality, as well as fish, plant and wildlife habitat in the Bay. The law defined the Critical Area as those lands under the tidal waters of Maryland's part of the Bay, the tidal waters themselves, and the shoreline measured 1000 feet from the mean high water line of the tidal waters, or from the landward side of tidal wetlands.

During the calendar years 1985 and 1986, the 26 member Critical Area Commission held over 19 hearings and met more than 75 times to provide Maryland with a strategy for protecting the water quality and habitat of the Bay with respect to present and future land use in the 1000 foot area. Criteria were developed and promulgated by the Commission on December 1, 1985 and, having been approved by the General Assembly, were signed into law by the Governor and the General Assembly on May 16, 1986.

For the remaining months of 1986 as well as calendar years 1987 and 1988, 16 counties and 44 municipalities used these criteria in the development of their respective local Critical Area Programs.

By the close of 1989, 38 town and 15 county programs had been approved by the Commission. Four (one county and three municipalities) are outstanding and six have been exempted from the program because of their limited development pressure and small size.

*The goal of the Population Growth and Development Section of the 1987 Bay Agreement is to: "Plan for and manage the adverse environmental effects of human population growth and land development ..."*

*"the Bay and rivers of the region have acted as powerful magnets to growth ... How the land is used is a basic factor in the ecological health of the Bay."*

*Year 2020 Report, December 1988*

1989 also marked the reassessment by local governments of changes needed in their local Critical Area Programs. Consequently, the Commission reviewed and approved over 11 amendments to existing programs, denying only two of them.

Pursuant to regulations promulgated by the Commission in 1988 requiring notification from the local governments of projects approved by them in the Critical Area, the Commission has received and reviewed over 379 projects and has had to intervene in only two local actions.

In 1988, the Commission also promulgated regulations required by the law pertaining to State and local agency actions in the Critical Area requiring Commission approval. The Commission has reviewed and approved over 25 projects under these regulations.

When the Critical Area Law took effect in July 1984, five senators and five delegates were appointed to review the development and implementation of the criteria for program development. The Committee, co-chaired by Senator James C. Simpson and Delegate Michael H. Weir, was quite active during the passage of the criteria in 1986. After 1986, the Committee periodically followed the development of the local programs. In 1988, the Oversight Committee expanded its role of review to include a determination of whether the criteria needed to be strengthened. In 1989, four regional public hearings were held to receive comments from the counties, municipalities and others as to the effectiveness of the Program. As a result, a few changes to the criteria and the Law will be made during the 1990 legislative session. It is anticipated that such a review will occur every two years involving the Committee, the Critical Area Commission, the 60 affected jurisdictions and public.

Following the death of Judge Solomon Liss in October 1988, a new Commission Chairman was appointed by Governor Schaefer. Judge John C. North II, from Talbot County, MD, became Chairman in May 1989.

## **Implementation of the Chesapeake Bay Preservation Act**

As a result of a report by Virginia's Chesapeake Bay Land Use Roundtable, the 1988 General Assembly passed the Chesapeake Bay Preservation Act. The Act, sponsored by Delegate W. Tayloe Murphy, Jr., is designed to supplement existing state and local government authorities, particularly the Virginia State Water Control Board's ability to limit point source discharges.

The Preservation Act established the Chesapeake Bay Local Assistance Board and Department (CBLAD), charging them with the responsibility of developing and implementing a cooperative state/local program and providing assistance to local governments in Tidewater Virginia. In turn, these local governments will incorporate general water quality protection measures into comprehensive plans, zoning ordinances, and subdivision regulations. The purpose of these regulations is to define and protect environmentally sensitive lands which will be designated as "Chesapeake Bay Preservation Areas".

In July, 1988, the Board and Department of Natural Resources began the process of compiling information and drafting minimum regulations to implement the Act. The criteria for designating Preservation Areas were the product of a year-long research, development and review process which included monthly Board meetings, discussions with local government officials and Planning District Commission members, meetings to hear the views of citizens, and the preparation and review of draft materials.

During this period, nine public hearings attracted some 3,000 people. More than 300 citizens gave oral presentations, and over 1,500 written comments were received and summarized by the CBLAD.

At the request of agricultural and environmental groups, Governor Baliles suspended the regulatory process to allow for additional public comment on two

issues: septic system criteria that the Board had deleted, and changes to agricultural criteria. The Board amended the final regulations which were then officially adopted on September 20, 1989.

The Regulations established criteria to be used by local governments in designating Chesapeake Bay Preservation Areas and in granting, denying or modifying requests for rezoning, subdivision or other use and development of land. The regulations also identify water quality protection requirements for local government comprehensive plans, zoning ordinances, and subdivision regulations.

The Preservation Act Regulations are divided into six parts, dealing with (1) the purpose, authority and application of the Regulations, (2) local government programs, (3) Chesapeake Bay Preservation Area designation criteria, (4) land use and development performance criteria, (5) implementation, assistance and determination of consistency, and (6) enforcement.

Tidewater Virginia local governments have until September 20, 1990, to designate Chesapeake Bay Preservation Areas and to adopt mechanisms to apply performance criteria. These local governments will be allowed an additional year for transforming current land use plans and ordinances into comprehensive management programs. The CBLAD will provide mapping resources and other help and guidance to support this implementation process.

Since adoption of the regulations, CBLAD, in cooperation with local governments and other state and regional agencies, has moved toward implementation. The regulations have been acted upon by a number of local governments. Still, they are being challenged in court by a group of land owners who contend that the regulations are an invalid abridgement of the rights of those who wish to develop their property. A final decision on the case is not expected until 1990.

The Department has distributed the first installment of the Local Assistance Manual to all Tidewater cities, counties and towns, and Planning District Commissions. This manual provides guidelines for constructing programs. In addition, CBLAD program staff have been assigned to each of the nine Planning District Commissions which cover Tidewater Virginia. They will serve as liaisons to local governments and be responsible for assisting through all aspects of program development.

## GROWTH CONFERENCES

The Chesapeake Bay Agreement focus on growth issues and the Year 2020 Report stimulated a series of conferences that brought private citizens and public officials together to discuss future courses of action. In addition, two of the Chesapeake Bay Commission's quarterly meetings during 1988 and 1989 focused almost exclusively on growth issues. Members and staff of the Chesapeake Bay Commission participated in all of the below mentioned conferences.

In February 1989, a Chesapeake Bay symposium on population growth and development was organized by the University of Maryland law school and the planning department of the University of Virginia. Residents from Pennsylvania, Maryland and Virginia were among the participants.

The Alliance for the Chesapeake Bay, Inc. sponsored a two-day conference in June 1989 on "The Growth Dilemma: The Chesapeake in the 21st Century." The session brought together some 300 people from throughout the watershed to take part in workshops and to hear speakers who are dealing with growth management issues in the Bay region and elsewhere. A white paper, "Managing Growth in the Chesapeake Region: A Policy Perspective", was published by the Alliance as a corollary to the conference.

In September of 1989, the Virginia Growth Management Forum was held in Williamsburg to further an exchange of information among various economic sec-

*"As we move into the 1990s, a call to better manage some of the impacts of growth is being heard, not only from environmentalists, but from a broad spectrum of citizens, municipal officials and even developers."*

*Managing Growth in the Chesapeake Bay: A Policy Perspective. May 1989*

tors having a stake in Virginia's future. This forum was an outgrowth of concerns shared by a number of non-profit organizations in the State.

Later the same month, the Executive Council's Local Government Advisory Committee focused on growth issues at its annual conference in Baltimore. About 100 government officials, planners and other participants took part in discussions of growth management, planning, cost issues and other topics related to development and the Bay restoration program.

Two conferences on growth and land policy were sponsored in 1989 by the Pennsylvania Environmental Council, one in April and one in October. Participants sought to create their own vision of what they want Pennsylvania communities to be in future years. A workshop focusing on the tools available to plan for and manage growth was sponsored in September by the Pennsylvania Planning Association. The Department of Community Affairs presented a conference, "Preparing for Growth and Development," in December at Shippensburg State University.

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## Chapter VIII

# OIL and the CHESAPEAKE BAY

The March 1989 grounding of the Exxon *Valdez* in Prince William Sound, Alaska, and the resulting catastrophic oil spill, captured the attention of the nation and the world. Shortly after this disaster, three major oil spills occurred along the Atlantic and Gulf coasts in a single weekend. The Chesapeake Bay Commission, and other groups in the region, were urged to examine the possibility of such an event occurring on the Bay and to review the adequacy of existing resources and mechanisms to respond to a major spill.

Commission staff prepared two white papers addressing various aspects of this question. The first, reviewed by the Commission in September, 1989, and adopted in November of 1989, was entitled "Oil Spill Liability Statutes and Clean-Up Programs for the Chesapeake Bay and Its Tributaries: A Review and Comparison". The paper presents, in matrix format, a review of the existing statutes in Maryland, Virginia, Pennsylvania and Alaska which pertain to specific issues of oil spill liability as well as the relevant requirements of federal law. Alaska programs were included in the matrix because of the publicity surrounding the *Valdez* spill and because the Alaska law has been touted as one of the most stringent in the nation.

The matrix was prepared in conjunction with the Virginia Attorney General's Office, and was reviewed by the Maryland and Pennsylvania Attorney General's Offices and by the U.S. Coast Guard. The paper addresses only those issues related specifically to waterborne transportation of oil and to oil storage at water-dependent facilities. Each of the states has additional, though more general, regulations governing the storage of other hazardous substances. Based on the analysis of existing state and federal laws that apply in the Chesapeake Bay region, the Chesapeake Bay Commission approved a series of recommendations which it believes, if acted upon, could improve the liability statutes and clean-up programs of the Bay states. The recommendations address such issues as funding for clean-up operations, requirements for oil discharge contingency plans and financial responsibility requirements for those who produce, transport and store oil and other petroleum products.

Coincident with the Commission's examination of this issue, the legislatures and executive agencies in both Maryland and Virginia were reviewing the adequacy of their own state programs and procedures. An Oil Exploration/Oil Spill Containment Workgroup of the House Environmental Matters Committee in Maryland developed draft legislation revising the State's oil spill liability and compensation statute and requiring additional training and preventive measures. The bill and an almost identical measure sponsored by the Administration were introduced early in the 1990 General Assembly session. The legislation incorporates virtually all of the recommendations suggested by the Chesapeake Bay Commission.

In Virginia, the Attorney General's Office developed similar legislation to comprehensively upgrade the Commonwealth's oil spill liability and compensation statute. That legislation was also introduced during the 1990 legislative session. Sponsored by a Commission member, the bill includes most of the recommendations of the Commission. Both states have also employed inter-agency task forces to examine the states' readiness and capability to respond to a major oil spill in the Bay region.

The second white paper prepared for the Commission, "A Review of Oil Spill Prevention Recommendations Made for the Chesapeake Bay Region" stresses that prevention must continue to be the first line of defense against spills. Be-

*Prevention must be the first line of defense against spills. Once a spill does occur, recovery of that oil can be as little as 10%.*



*The past year alone graphically demonstrated the necessity for effective regulation of the transport and handling of petroleum and petroleum products. The threat of irreparable harm is real.*

cause many of these preventative measures would require action by the U.S. Coast Guard, and because federal law is preemptive regarding questions of vessel design and safety, most of the Commission's recommendations would require implementation at the federal level.

Some of the changes recommended by the Chesapeake Bay Commission are new initiatives, while others are improvements to existing safeguards. For the most part, the changes which the Commission suggested to improve the chances of preventing an oil spill fall into three broad categories: (1) operations external to the vessel, (2) personnel operating the vessel and (3) design and equipment. The recommendations were endorsed by the full Commission in January of 1990 and forwarded to the appropriate federal agencies.

Copies of both papers are available from the Chesapeake Bay Commission, 60 West Street, Suite 200A, Annapolis, Maryland 21401.

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## Chapter IX

# BOAT PUMP-OUT FACILITIES in the CHESAPEAKE BAY

The disposal of waste materials from recreational and commercial vessels in the Bay area has been a subject of concern to the Chesapeake Bay Commission for some time. As early as 1983, a Commission-sponsored Work Group recommended that "the states work to establish a Bay-wide system of reasonably spaced recreational vessel pump-out facilities". This recommendation was repeated in 1986. In 1989, the Maryland General Assembly enacted legislation sponsored by the Chesapeake Bay Commission's Maryland delegation that prohibits a person from constructing a new marina or adding slips to an existing marina unless adequate pump-out facilities are provided at the marina or the marina has a contract with a nearby pump-out facility. By separate legislation in Maryland, a grants program was established whereby the Waterways Improvement Fund can be used to assist financially in the construction of additional pump-out facilities. Nevertheless, the issue has not yet been addressed in a comprehensive, Bay-wide manner and the Chesapeake Bay Commission elected to revisit the question during 1989.

The 1987 Chesapeake Bay Agreement includes a specific objective "to eliminate pollutant discharges from recreational boats". However, no individual commitment team or work group was assigned responsibility for the task. The Chesapeake Bay Commission requested staff to develop a white paper summarizing the status of boat sewage discharge into the Chesapeake Bay and to recommend actions which could be taken at the state and federal levels in order to ensure that the Bay Agreement commitment is met.

A white paper was produced and presented to the Commission prior to its September, 1989, meeting. The paper, "Boat Pump-out Facilities for the Chesapeake Bay: A Review and Recommendations", characterizes, in a general way, the potential water quality problems attributable to boat discharges. These include not only raw sewage, which can lead to the closure by condemnation of productive shellfish beds, but also increased biochemical oxygen demand (BOD), elevated nutrient levels and increased loadings of toxic substances which are frequently used in flow-through marine sanitation devices. The paper also included a review of the relevant state and federal law on the subject. It identifies some of the major issues that have yet to be resolved with respect to boat discharges and outlines those factors which should be considered in attempting to resolve these issues.

The precise magnitude of the impacts of recreational and commercial vessels on the water quality and productivity of the Bay is difficult to quantify. The sources of contamination which force the closure of shellfish grounds are not easily determined. While boat wastes may not be a major factor in declining water quality on a Bay-wide basis, they can, under certain circumstances, have a substantially negative effect on local water quality. It is important for a variety of reasons that the integrity of our smaller rivers and streams be maintained. These waters frequently serve as important spawning areas and have a number of other ecologically important functions.

More than two hundred thousand recreational boats ply the waters of the Bay and its tributaries. Generally speaking, the greatest risk from the wastes generated by these vessels occurs in those waters where boats are most heavily concentrated, particularly if dilution is limited and poor flushing conditions exist. Many of these areas where marinas and boating centers are concentrated are lo-

*The 1987 Chesapeake Bay Agreement includes a specific objective to eliminate the pollutant discharges from recreational boats.*

*The limited number and lack of use of pump-out facilities in many parts of the Bay constitute major stumbling blocks to EPA approval of No Discharge Zones at this time.*

cated in quiet, protected waters. Unfortunately, these waters are often ecologically fragile and, thus, most susceptible to damage from pollution.

While the most fundamental concerns are an overall lack of pump-out facilities in the region and a limited interest on the part of the boating community to use them, the issues surrounding marine sanitation devices (MSDs) and boat pump-out facilities are considerably more complex. They are compounded by a mix of federal versus state and public versus private considerations that further cloud the issue.

U.S. Environmental Protection Agency regulations require all vessels with installed toilets to be equipped with an operable MSD meeting certain federal specifications based on the size of the vessel. Certification and enforcement are the responsibilities of the U.S. Coast Guard. States are basically preempted from issuing differing MSD requirements, though they may petition the EPA to declare certain waters of the state as No Discharge Areas. In order to be eligible for the No Discharge Area designation, a state must demonstrate the availability of an adequate number of readily accessible pump-out facilities in the area. Marina operators, however, are generally reluctant to provide such facilities until enforceable No Discharge Areas are established and there is some assurance that the facilities would, in fact, be used. This regulatory scheme has been "under review" at the state and federal levels for a number of years and resolution of the situation does not appear imminent. In the meantime, the elimination of pollutant discharge from recreational boats remains stalemated in a "Catch-22" situation.

The Commission white paper identifies and discusses seven major issues surrounding the question of boat discharges and recommends a sequential process of steps that will improve the availability and use of boat pump-out facilities. The Commission has recommended that the following steps be taken:

1. The Bay states, as a part of their next biennial water quality inventory compiled pursuant to Section 305(b) of the Federal Water Quality Act, identify waters which, because of water quality, living resources or habitat considerations, might be particularly sensitive to discharges from marine sanitation devices;
2. The Bay states should, by January 1991, conclude a study examining the adequacy of existing laws and programs governing the provision of, and public funding for, pump-out facilities and present the findings of such studies to the Chesapeake Bay Commission at its quarterly meeting in January, 1991;
3. The Bay states should first assess the quantity of sewage collected at existing and proposed marina pump-out facilities and document the geographic distribution of this waste stream. An assessment must be made to determine if this holding tank waste, once collected, can be adequately treated at local facilities. If, based on this examination, it cannot be, receiving sewage treatment plants must be identified that have adequate capacity to accommodate this waste;
4. The Bay states should develop and implement programs to educate the boating public to stimulate increased utilization of pump-out facilities. The states should also determine the extent to which financial and other disincentives reduce boater utilization of pump-out stations, and take appropriate steps to eliminate those disincentives;
5. Because both financial and management constraints make it impossible to designate the entire Bay as a No Discharge Zone in the immediate future, those waters most adversely impacted by discharges from marine sanitation devices

should be targeted for priority construction of needed pump-out facilities and concentrated boater education programs. In appropriate cases, the states should consider designating these waters as No Discharge Zones, following affirmative determinations by EPA on any petitions submitted by the states to EPA;

6. The members of the Chesapeake Executive Council should appoint a commitment team composed of representatives of each of the signatories to the 1987 Chesapeake Bay Agreement, as well as representatives of the U.S. Coast Guard and the boating community, charged with the responsibility of developing a strategy to eliminate the discharge of sewage from recreational boats. This group should adopt, as a long term goal, the declaration of the Bay and its tributaries, as a No Discharge Zone.

Following thorough discussion and review, the full Commission unanimously resolved to pursue, as a long term goal, the declaration of the entire Bay and its tributaries as a No Discharge Zone. The Commission realizes that such a designation probably lies many years in the future, but the resolution recognizes the reality that the only way in which "the elimination of pollutant discharges from recreational boats" (as called for in the Bay Agreement) can be attained is through the establishment of a Bay-wide No Discharge Area. As a means of working toward this ultimate goal, the Chesapeake Bay Commission has offered its recommendations as a series of systematic steps which, if taken, will better position us to achieve our goal.



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## Chapter X

# FEDERAL LEGISLATION and ACTIVITIES

The U.S. Congress and various federal agencies play a vital role in the Chesapeake Bay clean-up effort. Two commitments in the 1987 Chesapeake Bay Agreement speak specifically to federal involvement in the Program. The Environmental Protection Agency (EPA), on behalf of the federal government, pledged to develop and adopt and begin to implement a strategy for the control and reduction of point and nonpoint sources of pollution from all federal facilities in the region by July of 1988. The Agency also committed to develop a coordinated federal agency workplan which identifies specific federal programs to be integrated into a coordinated federal effort to support the restoration of the Chesapeake Bay. Both commitments have been met.

The Environmental Protection Agency's Chesapeake Bay Program Office, authorized by the Water Quality Act of 1987 and housed in Annapolis, continues to oversee general administration of the Program. The Water Quality Act authorized the Bay Program at \$13 million per year for a period of four years, though the full funding level has never been appropriated. Actual appropriations during FY 88, FY 89 and FY 90 hovered close to \$12 million per year. A major portion of these funds are used for implementation grants to the states with the remainder being used for administrative costs, computer support, technical staff assistance, and programs that further the ability of the signatories to implement the Chesapeake Bay Agreement.

While the EPA, by virtue of its Water Quality Act mandate and as a signatory to the Chesapeake Bay Agreement, is the "lead" agency, many other federal agencies have made commitments to work together to restore the Bay. New Memoranda of Understanding were developed and signed in 1988 and 1989 between the EPA and the Forest Service, the Agricultural Stabilization and Conservation Service, and the USDA Extension Service in cooperative pursuit of the Bay restoration goals. Previously existing Memoranda with the Department of Defense, the U.S. Fish and Wildlife Service and the Soil Conservation Service have been expanded to include a broader range of activities. The National Oceanic and Atmospheric Administration has increased its involvement in and financial commitment to the Bay Program, particularly in the areas of implementing the Basinwide Toxics Reduction Strategy and the fisheries stock assessment plans. The U.S. Army, Navy and Coast Guard have each assigned a Chesapeake Bay coordinator to oversee activities which potentially impact the Bay and its environs. Officials of all these agencies are actively involved in the deliberations of the Implementation Committee and many of its subcommittees and participate in the work of the Chesapeake Bay Commission on an as-needed basis.

Congress and the federal agencies have been involved, on a national level, with many of the same issues which the Chesapeake Bay community has been attempting to address on a regional level. Regulatory and budgetary initiatives have, in general, been more successful in recent years than have legislative proposals in addressing environmental concerns. Congressional interest in and support for the Chesapeake Bay Program has generally remained high through 1988 and 1989. Several Bay area Senators and Congressmen occupy key positions on the environmental and appropriations committees of the Senate and the House. The Congressional delegations of Maryland, Virginia, Pennsylvania have been actively involved in securing appropriations for Bay-related programs.

In September of 1988, the Subcommittee on Environmental Protection of the U.S. Senate Committee on Environment and Public Works held a hearing to review the progress of the programs which had been put into place to restore and

*The U.S. Congress and various federal agencies play a vital role in the Chesapeake Bay clean-up effort.*

*"We are proud of the steps which we have taken and we look forward to continuing our leadership role at the state level, but we also recognize the ongoing need for a strong federal presence if our efforts are to ultimately succeed."*

*Delegate W. Tayloe Murphy, Jr. in testimony before the U.S. Senate Subcommittee on Environmental Protection. September 20, 1988*

protect the Chesapeake Bay. The Chesapeake Bay Commission, as well as the other signatories to the Bay Agreement, was invited to testify. In his testimony, Commission Chairman Delegate W. Tayloe Murphy, Jr. stressed the inter-jurisdictional cooperative nature of the Bay Program and urged the federal government to continue its strong support. He offered a number of specific suggestions concerning program areas in which federal assistance could be strengthened.

The issue of wetlands protection has received major attention from the Environmental Protection Agency and other federal agencies over the past several years. At the request of the Agency, a National Wetlands Policy Forum was convened by The Conservation Foundation in the summer of 1987 to consider major policy concerns about the protection and management of these valuable resources. The House Public Works Water Resources Subcommittee held a series of hearings on the status of the nation's wetlands in April and May of 1989. The findings of the Forum and increased Congressional interest have resulted in major federal initiatives which parallel, in concept, the efforts currently underway, as a result of the Bay Agreement, to adopt and implement a Bay-wide wetlands protection policy.

The report of the Forum called for, and President Bush subsequently endorsed, a national policy calling for "no net loss" and a "net resource gain" of wetlands resources. This national policy directly parallels the goals adopted by the Chesapeake Bay Agreement signatories in the Bay-wide wetlands policy. Attainment of this policy objective will obviously involve the development and implementation of a consistent policy of mitigation to replace those wetlands which are unavoidably lost through permitted projects.

Over the past decade, differing interpretations on the part of EPA and the U.S. Army Corps of Engineers on such basic questions as what constitutes a wetland, appropriate mitigation measures and the advanced identification of wetlands of significance which should not be disturbed under any circumstances have led not only to resource losses, but also to delays in the permitting process and general confusion regarding questions of jurisdiction and identification.

There are signs that such clouds of bureaucratic confusion are being lifted. The EPA and the Corps of Engineers have agreed to a common definition of wetlands and the two agencies signed a Memorandum of Agreement in 1989 concerning the Determination of Mitigation under the Clean Water Act Section 404 (b) (1) Guidelines. Implementation of this MOA, however, has been delayed pending further interagency review. This additional review was occasioned by the assertion of the Alaskan Congressional delegation that the proposed Agreement would define the majority of that state as "wetlands", thereby precluding most development options within the state.

No decision has yet been made concerning possible modifications to the Agreement. The Chesapeake Bay Commission has expressed to the President its strong support for the immediate implementation of this Memorandum of Agreement and urged continued Administration leadership in regulatory efforts to protect and conserve the nation's wetlands resources.

Legislative interest in the issue of wetlands and open space protection has also been high. Representative Morris K. Udall introduced legislation in 1988 known as the American Heritage Trust Act. The bill was intended to create a permanent and predictable source of funds for the acquisition of parklands, recreational and wildlife areas and forestlands. The Chesapeake Bay Commission adopted a resolution supporting the Act (see Appendix C) and requested its Congressional delegations to strongly endorse the measure. The bill was considered by the Congress in 1988, and re-introduced in 1989, but has not yet been adopted. Both the House and the Senate considered bills during 1989 to save wetlands habitat and rebuild waterfowl populations. The bills, which would authorize approximately \$11 billion for wetlands purchase, are designed to implement U.S. obligations under the North American Waterfowl Management Plan, a 1986 agreement between the U.S. and Canada.

Clearly, the Water Quality Act of 1987 was one of the most important water quality initiatives adopted by the U.S. Congress in the past decade. The Act,

scheduled for reauthorization in 1991, has many implications for the Chesapeake Bay states. Many of its provisions, however, have never been implemented and many more have been inadequately funded. Regulations governing stormwater management permits have not yet been developed and funding has not been provided for the nonpoint source provisions of the Act. These and other provisions of the Act, such as the development of criteria and standards for toxic substances, will figure prominently in the ability of the Chesapeake Bay states to meet the commitments in the 1987 Bay Agreement.

Of particular interest to the states in the Bay region are the provisions regarding funding for the sewage treatment plant construction grants program. This program has, since 1972, provided the bulk of the necessary funding for the construction of sewage treatment plants throughout the nation. One effect of the 1987 legislation was to gradually phase out this program by 1991 and to replace it with federal capitalization support for State Revolving Funds to finance the construction and upgrade of sewage treatment plants. Maryland, Virginia and Pennsylvania have each established a State Revolving Fund to meet their infrastructure needs.

The 1987 Water Quality Act authorized \$1.2 billion annually for the construction grants program and \$1.2 billion for the State Revolving Funds. These authorized levels, however, have never been appropriated. Actual appropriations have been approximately one-half of the authorized level. In considering the Fiscal Year 1990 budget, the Congress appropriated slightly more than \$2 billion for the construction grants and state revolving loan programs, reversing the downward trend of the late 1980's. This total, while less than the authorized level, is significantly greater than that which had been proposed by the President. The FY 1990 budget, however, has not yet received final Congressional approval. The approved funding levels will not be realized unless the Congress approves deficit reduction legislation in order to comply with the Gramm-Rudman-Hollings balanced budget law.

In the wake of the Alaskan oil spill, the Congress accelerated its efforts to develop comprehensive oil spill liability legislation. Proposed legislation had been under consideration since 1986. A major issue during the Congressional debates was whether federal legislation should preempt higher liability limits set by individual state legislation. Both the House and the Senate adopted bills during 1989 which do not preempt state law. The Oil Pollution Act of 1989 (H.R. 3394 and S. 686) sets a single federal liability standard for clean-up costs and damages, increases liability limits, and creates a new contingency fund for paying immediate costs. Additional provisions address spill prevention, contingency planning, spill response and research. Minor differences remain to be worked out between the House and Senate versions of the bill, but it is expected that the bill will be enacted into law in 1990.

The Congress has also been involved in several issues related to the living resources of the Chesapeake Bay region. In 1988, Representative Roy P. Dyson of Maryland introduced the Oyster Disease Research Assistance Act. The legislation would provide funding to support research into the causes of, and potential solutions for, the devastating effects of oyster diseases throughout the nation. The diseases MSX and *Dermo* have been particularly damaging to the Chesapeake Bay oyster population in recent years. The Commission endorsed this measure and conveyed its support to the Congressional delegations of the three states. It appears that additional federal funds will be appropriated in the current fiscal year to address this problem.

The Atlantic Striped Bass Conservation Act continues to drive state policy regarding striped bass management. Under the Act, states which do not conform to the Striped Bass Management Plan adopted by the Atlantic States Marine Fisheries Commission (ASMFC) are subject to a federally-imposed moratorium on the fishery. The ASMFC plan is based on the Maryland young-of-the-year index for striped bass, the most comprehensive data set regarding striped bass reproductive success in the nation. The Plan allows states along the Atlantic seaboard to impose less restrictive harvesting limitations when the three-year

*This national (wetlands) policy directly parallels the goals adopted by the Chesapeake Bay Agreement signatories in the Bay-wide wetlands policy.*



*While several important environmental measures have been adopted or reauthorized in the past several years, many issues have been left unresolved.*

average for the young-of-the-year survey reaches 8.0. Strong reproductive success of the species in 1989 has allowed the attainment of this goal, and both Maryland and Virginia intend to have a limited commercial and recreational fishery for striped bass in 1990.

During the years of the Reagan administration and the first year of the Bush administration, Congressional interests have been focused largely on domestic spending and revenue-generating issues in efforts to reduce the federal deficit. While several important environmental measures have been adopted or reauthorized in the past several years, many issues have been left unresolved. Several major bills were introduced during 1989 and they will likely be reconsidered during 1990 by the 101st Congress.

A major test of the Administration's commitment to the environment will be its leadership in efforts to reauthorize the Clean Air Act. The law expired in 1981 and, despite more than seven years' efforts, Congress has not yet been able to reach a compromise. The major stumbling blocks appear to be acid rain and automobile emissions standards. Efforts to reauthorize the Clean Air Act are especially important to Chesapeake Bay states because recent evidence suggests that acid rain may be a contributing factor in the declining reproductive success of striped bass in the Bay system. Estimates indicate that atmospheric deposition is responsible for as much as twenty-five percent of the total nitrogen loadings to the Chesapeake Bay.

The Food Security Act of 1985 (the "Farm Bill") is also scheduled for Congressional reauthorization in 1990. The Chesapeake Bay Commission has maintained an active interest in this legislation, particularly regarding its "sodbuster" and "swampbuster" provisions and the Conservation Reserve Program. These articles are designed to remove highly erodible croplands and wetlands from production, thus reducing the amount of agricultural runoff reaching our streams and waterways. The Commission has adopted several resolutions in support of the Conservation Reserve Program (See Appendix C), encouraging increased participation by Bay area farmers and urging the U.S. Department of Agriculture to broaden the Program focus to include greater emphasis on its potential water quality benefits.

Groundwater legislation will be another major issue during 1990, and may be considered as a part of the Farm Bill reauthorization process. Both the House and the Senate passed groundwater bills during 1989 addressing both research and coordination, but differences could not be resolved prior to adjournment. A major issue of disagreement has concerned which federal agency—the Environmental Protection Agency or the U.S. Geological Survey—should have the primary role in groundwater research. The issue is important to the Bay states because of high water tables and suspected groundwater nutrient contamination in the Susquehanna River Basin and on the Eastern Shore of Maryland and Virginia.

Hazardous wastes will continue to receive Congressional attention as both Houses attempt to move legislation to reauthorize the Resource Conservation and Recovery Act (RCRA). Important issues being considered in conjunction with this legislation include PCBs, waste minimization, compliance at federal facilities and recycling.

Several important bills were passed in 1988 dealing with ocean dumping, medical waste tracking and plastics pollution. These bills were largely the result of public concern and outcry over much-publicized coastal pollution problems that have plagued many sections of the country over the past several years. At least four bills designed to address coastal pollution issues in a comprehensive fashion are currently before the Congress. These bills, which consider both land-based and water-based pollution issues, are expected to be a major focus of discussion during the 101st Congress. Among the issues being debated are the establishment by EPA of federal water quality standards for preserving coastal water quality, increased penalties for non-compliance with pollution control laws, the elimination of overflows from combined storm and sanitary sewers in coastal areas, re-

*The federal Conservation Reserve Program should expand its focus to include greater emphasis on water quality benefits.*

quired actions to prevent and/or remediate degradation of designated waters, and increased emphasis on the water quality implications of coastal land use.

Congress began its deliberations on the role of the federal government in issues relating to coastal management and land use by holding preliminary hearings on the reauthorization of the Coastal Zone Management Act (CZM). Reauthorization is scheduled for 1990. Congress's examinations have focused on whether the federal government should play a stronger role in directing State programs on land use issues.

Also of significance, President Bush will be including a \$30 million appropriation for State Administrative Grants under the Coastal Zone Management Act in his FY 91 budget. This represents a significant departure from a nine year presidential policy of zero funding for state coastal zone management grants.

The legislative and budgetary actions of the federal government will continue to have major impacts on efforts to restore and protect the Chesapeake Bay. The federal commitment, in many respects, drives the process from both a physical and psychological point of view. Recent indications that the Bush administration might elevate the U.S. Environmental Protection Agency to cabinet status offer great hope for the environmental agenda of the 1990s. Continued federal support is absolutely essential if the programs and policies initiated at the state level over the past six years are to reach fruition. Without this federal presence and support, the states may have difficulty in finding and maintaining both the resolve and the resources necessary to persevere in their efforts.

*Recent indications that the Bush administration might elevate the U.S. Environmental Protection Agency to cabinet status offer great hope for the environmental agenda of the 1990s.*



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**APPENDIX A**  
**TRI-STATE AGREEMENT CREATING THE CHESAPEAKE BAY**  
**COMMISSION**

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**PREAMBLE**

WHEREAS, The Chesapeake Bay, its tributaries, wetlands, and dependent natural resources constitute a unified ecosystem shared and used by the State of Maryland, the Commonwealth of Virginia, and the Commonwealth of Pennsylvania; and

WHEREAS, Utilization of the resources of the Bay, including, but not limited to, management and regulatory programs for migratory fowl, finfish, shellfish and implementation of methods to achieve compatible usage of the Bay for commercial and mercantile interests and all actions which effect changes in water quality, substantially involve the joint interests of the three states; and

WHEREAS, The Chesapeake Bay Commission was formed in 1980 to assist the legislatures of Maryland and Virginia to evaluate and respond to problems of Bay-wide concern; and

WHEREAS, Studies completed by the United States Environmental Protection Agency, the United States Army Corps of Engineers and others have emphasized the importance of the drainage system of the lower Susquehanna River to the health and welfare of the Chesapeake Bay; and

WHEREAS, The need for effective cooperation and coordination of Bay management among the states of Virginia, Maryland and Pennsylvania has been stressed by participants in the 1983 Chesapeake Bay Conference; now, therefore be it

RESOLVED, That the General Assemblies of Virginia, Maryland and Pennsylvania enact legislation adopting an Agreement relating to the Chesapeake Bay and creating the Chesapeake Bay Commission.

**CHESAPEAKE BAY COMMISSION**  
**ARTICLE I.**

**MEMBERSHIP AND ORGANIZATION**

**SECTION 1. Commission created.** — The Chesapeake Bay Commission, hereinafter designated as "Commission," is hereby created.

**SECTION 2. Members.** — The Commission shall consist of twenty-one members, seven from Virginia, seven from Maryland and seven from Pennsylvania. In each state, five of the members shall be members of the General Assembly. In Maryland, two Senators designated by the President of the Senate and three Delegates designated by the Speaker of the House of Delegates shall serve as members. The Governor of Maryland or his designee shall serve as a member. In addition, the President of the Senate and the Speaker of the House of Delegates shall jointly select one Maryland member who is not a legislator or an employee of the executive branch. In Virginia, two Senators designated by the Committee on Privileges and Elections and three Delegates designated by the Speaker of the House of Delegates shall serve as members. The Governor of Virginia or his designee shall serve as a member. In addition, the Senate Committee on Privileges and Elections and the Speaker of the House of Delegates shall jointly select one Virginia member who is not a legislator or an employee of the executive branch. In Pennsylvania, two Senators designated by the President pro tempore of the Senate and three Representatives designated by the Speaker of the House of Representatives shall serve as members. The Governor of Pennsylvania or his designee shall serve as a member. In addition, the President pro tempore of the Senate shall select one Pennsylvania member who is not a legislator or an employee of the executive branch.

**SECTION 3. Term.** — Legislators serving as members of the Commission shall serve terms coterminous with their current terms of office. The nonlegislative members shall serve at the pleasure of their respective appointing authorities for a term of not more than four years. Nonlegislative members may be reappointed at the end of the four-year term.

**SECTION 4. Compensation.** — The Commission members shall serve without compensation from the Commission but may be reimbursed by the Commission for necessary expenses incurred in and incident to the performance of

their duties. In addition, Commission members from each state may receive from their respective states other compensation to which they may be entitled under the laws of their respective states.

**SECTION 5. Meetings and voting.** — Commission meetings shall be held at least once each quarter and at such other times as the Commission may determine. In order to constitute a quorum for the transaction of any business, at least eleven Commission members, including at least three Commission members from each state, must be present. Approval of proposed actions shall require the majority vote of the Commission members present.

**SECTION 6. Organization, internal procedures and delegation of powers.**

A. The Commission members shall serve as the governing body of the Commission and, except as hereinafter provided, shall exercise and discharge all powers, functions and responsibilities assigned to the Commission. The Commission shall provide for the organization of internal procedures of the Commission and, to this end, shall adopt suitable bylaws. The Commission shall have a chairman and two vice-chairmen, chosen by the respective delegations, whose offices shall rotate annually among the signatory states and may at no time be held by members from the same signatory. The Commission may maintain one or more offices for the transaction of its business. The Commission may, without regard to the civil service or the laws of any signatory relative to public officers and employees, create and abolish offices, employments and positions as it deems necessary for the purposes of the Commission. affix and provide for the duties, conditions for employment, qualifications, appointment, removal, term, compensation and other rights and benefits of the Commission's officers and employees, and shall appoint the principal officers of the Commission and allocate among them administrative functions, powers and duties. The Commission may delegate to the officers and employees of the Commission any powers, functions and responsibilities under this Agreement as it deems suitable, except that it may not delegate its power to make recommendaions to the respective legislatures, to issue reports or to adopt the annual expense budget.

B. Every full-time officer or employee of the Commission on a salary basis shall be eligible for pension and health and related insurance offered to employees of one of the member states, provided that such officer or employee so elects within 30 days of commencing employment; and provided that the Commission allocates funds in its budget for the employer share of these benefits.

## ARTICLE II.

### PURPOSES, POWERS AND DUTIES

**SECTION 7. Purposes.** — The purposes of the signatories in enacting this Agreement are to assist the legislatures of Maryland, Virginia and Pennsylvania in evaluating and responding to problems of mutual concern relating to the Chesapeake Bay; to promote intergovernmental cooperation; to encourage cooperative coordinated resource planning and action by the signatories and their agencies; to provide, where appropriate, through recommendation to the respective legislatures, uniformity of legislative application; to preserve and enhance the functions, powers and duties of existing offices and agencies of government; and to recommend improvements in the existing management system for the benefit of the present and future inhabitants of the Chesapeake Bay region.

**SECTION 8. Powers.** — In pursuit of the purposes and duties set forth in this article, the Commission may exercise the following powers:

1. The Commission may collect, compile, analyze, interpret, coordinate, tabulate, summarize and distribute technical and other data relative to the Chesapeake Bay and its environs. It may conduct or contract for studies, except those for primary scientific research, and may prepare reports on existing or potential problems within the Bay region.
2. The Commission may prepare, publish and disseminate information in reports related to the resources of the region.
3. The Commission may serve as an advisory board to any requesting agency of the member states on matters of interstate concern.
4. The Commission may make application for grants, services or other aids as may be available from public or private sources to finance or assist in effectuating any purposes of this Agreement; and receive and accept the same on such terms and conditions as may be required by the laws of the respective signatory states.

5. The Commission may purchase administrative supplies and may lease sufficient office space if such space is not otherwise made available for its use.
6. The Commission may exercise such other powers as are granted by this Agreement and take such actions as are necessary or appropriate for performing the duties set forth in this Agreement.

**SECTION 9. Duties.** — In carrying out the purposes set forth in this article, the Commission shall have the following duties:

1. The Commission shall (i) identify specific Bay management concerns requiring intergovernmental coordination and cooperation, and (ii) recommend to the Federal, State and local governments, which are involved in the Chesapeake Bay region, legislative and administrative actions necessary to effectuate coordinated and cooperative management for the Chesapeake Bay.
2. In administering the provisions of this Agreement the Commission shall consider the needs of the region for industrial and agricultural development and for gainful employment and maintenance of a high quality environment.
3. The Commission shall respect and support the primary role of the respective signatory states and their administrative agencies in managing the resources of the region.
4. The Commission shall collect, analyze and disseminate information pertaining to the region and its resources for the respective legislative bodies. The Commission shall prepare an annual report indicating the status of environmental and economic issues involving the Chesapeake Bay and the progress of coordinative efforts by the member states.
5. The Commission shall represent common interests of the signatories as they are affected by the activities of the Federal Government and shall assist in the monitoring of those activities in the Chesapeake Bay region.
6. The Commission may provide a forum to serve as an advisory mediator for programmatic conflicts between or among the member states when such action is requested by the conflicting member states.

### **ARTICLE III.**

#### **BUDGETS AND FINANCING**

**SECTION 10. Annual budget.** — The Commission shall annually adopt a budget which shall include the Commission's estimated expenses for administration and operation. In establishing the annual current expense budget, the Commission shall balance total expenses against the Commission's estimate of revenues from all sources, either previously appropriated by a signatory state or receivable from any person or governmental agency by contract or grant with that person or governmental agency. The chairman of the Commission shall certify to the respective signatories, and submit to persons in other governmental agencies, statements of the amounts requested from them in accordance with existing cost-sharing established by this Agreement or by the parties. The Chairman of the Commission shall transmit certified copies of such budgets to the principal budget officer of the respective signatory parties at such time and in such manner as may be required under their respective budgetary procedures.

**SECTION 11. Apportionment of cost.** — The amount required for the Commission's current expense budget shall be apportioned equally among the signatory parties unless a different apportionment is agreed to by unanimous vote of the Commission.

**SECTION 12. Budget for 1988-1989.** — The current expense budget for the 1988-1989 fiscal year shall be \$324,000, to be equally apportioned among the respective signatory states.

### **ARTICLE IV.**

#### **AMENDMENTS TO AGREEMENT**

**SECTION 13. Modification.** — This Agreement shall not be amended or modified except with the concurrence of the legislatures of the State of Maryland, the Commonwealth of Virginia and the Commonwealth of Pennsylvania. No amendment shall become effective until adopted in the same manner as the original Agreement.

## ARTICLE V.

### DURATION OF AGREEMENT

**SECTION 14. Term.** — The duration of this Agreement among the State of Maryland, the Commonwealth of Virginia and the Commonwealth of Pennsylvania shall be for an initial period of ten years from its effective date, and it shall be continued for additional periods of ten years unless one or more of the signatory states, by authority of an act of its legislature, notifies the Commission of intention to terminate the Agreement at the end of the current ten-year term; provided, however, that any signatory, by act of its legislature, can withdraw from the Agreement at the end of any calendar year or fiscal year.

**SECTION 15. Dissolution.** — In the event that this Agreement shall be terminated by operation of Section 14, the Commission shall be dissolved, its assets and liabilities transferred and its corporate affairs wound up in accordance with the unanimous agreement of its signatories or, failing unanimous agreement, in such manner that the assets and liabilities of the Commission shall be shared by the respective states.

**SECTION 16. Governor to execute Agreement.** — The Governor is authorized and directed to execute and deliver the above stated Agreement related to the Chesapeake Bay Commission, and to take those actions which may be necessary to effectuate the Agreement.

Note: There are several nonessential differences in legislative language among the authorizing statutes of the three signatories to the Agreement. The precise wording of this Agreement can be found in the Annotated Code of Maryland, Natural Resources Article, Section 8-302; in the Code of Virginia, Title 62.1, Chapter 5.2, Sections 62.1-69.5 through 62.1-69.20; and in Laws of Pennsylvania, Act 25 of 1985, 32 P.S. Sections 820.11.

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## APPENDIX B

### 1987 CHESAPEAKE BAY AGREEMENT

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**THE CHESAPEAKE BAY IS A NATIONAL TREASURE** and a resource of worldwide significance. Its ecological, economic, and cultural importance are felt far beyond its waters and the communities that line its shores. Man's use and abuse of its bounty, however, together with the continued growth and development of population in its watershed, have taken a toll on the Bay system. In recent decades, the Bay has suffered serious declines in quality and productivity. • **REPRESENTING** the Federal government and the States which surround the Chesapeake Bay, we acknowledge our stake in the resources of the Bay and accept our share of responsibility for its current condition. We are determined that this decline will be reversed. In response, all of our jurisdictions have embarked on ambitious programs to protect our shared resource and restore it to a more productive state. • **IN 1980**, the legislatures of Virginia and Maryland established the Chesapeake Bay Commission to coordinate interstate planning and programs from a legislative perspective. In 1985, Pennsylvania joined the Commission. And, in 1983, Virginia, Maryland, Pennsylvania, the District of Columbia, the U.S. Environmental Protection Agency and the Chesapeake Bay Commission formally agreed to a cooperative approach to this undertaking and established specific mechanisms for its coordination. Since 1983, our joint commitment has carried us to new levels of governmental cooperation and scientific understanding. It has formed a firm base for the future success of this long-term program. The extent and complexity of our task now call for an expanded and refined agreement to guide our efforts toward the twenty-first century. • **RECOGNIZING** that the Chesapeake Bay's importance transcends regional boundaries, we commit to managing the Chesapeake Bay as an integrated ecosystem and pledge our best efforts to achieve the goals in this Agreement. We propose a series of objectives that will establish a policy and institutional framework for continued cooperative efforts to restore and protect Chesapeake Bay. We further commit to specific actions to achieve those objectives. The implementation of these commitments will be reviewed annually and additional commitments developed as needed.

#### GOALS AND PRIORITY COMMITMENTS

**THIS NEW AGREEMENT CONTAINS** Goals and Priority Commitments for Living Resources; Water Quality; Population Growth and Development; Public Information, Education and Participation; Public Access; and Governance. • The parties to this 1987 Agreement are the U.S. Environmental Protection Agency representing the Federal government, the District of Columbia, the State of Maryland and the Commonwealths of Pennsylvania and Virginia (hereinafter the "States") and the Chesapeake Bay Commission. This Agreement may be amended and attachments added in the future by unanimous action of the Chesapeake Executive Council.

#### LIVING RESOURCES

**GOAL: PROVIDE FOR THE RESTORATION AND PROTECTION OF THE LIVING RESOURCES, THEIR HABITATS AND ECOLOGICAL RELATIONSHIPS.**

The productivity, diversity and abundance of living resources are the best ultimate measures of the Chesapeake Bay's condition. These living resources are the main focus of the restoration and protection effort. Some species of shellfish and finfish are of immense commercial and recreational value to man. Others are valuable because they are part of the vast array of plant and animal life that make up the Chesapeake Bay ecosystem on which all species depend. We recognize that the entire natural system must be healthy and productive. We will determine the essential elements of habitat and environmental quality necessary to support living resources and will see that these conditions are attained and maintained. We will also manage the harvest of and monitor populations of commercially, recreationally and ecologically valuable species to ensure sustained, viable stocks. We recognize that to be successful, these actions must be carried out in an integrated and coordinated manner across the whole Bay system.

**OBJECTIVES:**

- Restore, enhance, protect and manage submerged aquatic vegetation.
- Protect, enhance and restore wetlands, coastal sand dunes, forest buffers and other shoreline and riverine systems important to water quality and habitat.
- Conserve soil resources and reduce erosion and sedimentation to protect Bay habitat.



- Maintain freshwater flow regimes necessary to sustain estuarine habitats, including, where appropriate, establishing minimum instream flows.
- Develop comparable Bay-wide stock assessment programs.
- Develop Bay-wide fisheries management strategies and develop complementary state programs and plans to protect and restore the finfish and shellfish stocks of the Bay, especially the freshwater and estuarine spawners.
- Provide for the restoration of shellfish stocks in the Bay, especially the abundance of commercially important species.
- Restore, enhance and protect waterfowl and wildlife

#### COMMITMENT

##### TO ACHIEVE THIS GOAL WE AGREE:

- by *January 1988*, to develop and adopt guidelines for the protection of water quality and habitat conditions necessary to support the living resources found in the Chesapeake Bay system, and to use these guidelines in the implementation of water quality and habitat protection programs.
- by *July 1988*, to develop, adopt and begin to implement a Bay-wide plan for the assessment of commercially, recreationally and selected ecologically valuable species.
- by *July 1988*, adopt a schedule for the development of Bay-wide resource management strategies for commercially, recreationally and selected ecologically valuable species.
- by *July 1989*, to develop, adopt and begin to implement Bay-wide management plans for oysters, blue crabs and American Shad. Plans for other major commercially, recreationally and ecologically valuable species should be initiated by 1990.
- by *December 1988*, to develop a Bay-wide policy for the protection of tidal and non-tidal wetlands.
- Provide for fish passage at dams, and remove stream blockages wherever necessary to restore natural passage for migratory fish.

### WATER QUALITY

**GOAL: REDUCE AND CONTROL POINT AND NONPOINT SOURCES OF POLLUTION TO ATTAIN THE WATER QUALITY CONDITION NECESSARY TO SUPPORT THE LIVING RESOURCES OF THE BAY.**

The improvement and maintenance of water quality are the single most critical elements in the over-all restoration and protection of the Chesapeake Bay. Water is the medium in which all living resources of the Bay live, and their ability to survive and flourish is directly dependent on it. • To ensure the productivity of the living resources of the Bay, we must clearly establish the water quality conditions they require and must then attain and maintain those conditions. Foremost, we must improve or maintain dissolved oxygen concentrations in the Bay and its tributaries through a continued and expanded commitment to the reduction of nutrients from both point and nonpoint sources. We must do the same for toxics and conventional pollutants. To be effective, we will develop basin-wide implementation plans for the control and reduction of pollutants which are based on our best understanding (including that derived from modeling) of the Bay and its tributaries as in integrated system.

#### OBJECTIVES:

- Provide timely construction and maintenance of public and private sewerage facilities to assure control of pollutant discharges.
- Reduce the discharge of untreated or inadequately treated sewage into Bay waters from such sources as combined sewer overflows, leaking sewage systems, and failing septic systems.
- Evaluate and institute, where appropriate, alternative technologies for point source pollution control, such as biological nutrient removal and land application of effluent to reduce pollution loads in a cost-effective manner.
- Establish and enforce pollutant limitations to ensure compliance with water quality laws.

- Reduce the levels of nonpoint sources of pollution.
- Reduce sedimentation by strengthening enforcement of existing control regulations.
- Eliminate pollutant discharge from recreational boats.
- Identify and control toxic discharges to the Bay system, including metals and toxic organics, to protect water quality, aquatic resources and human health through implementation and enforcement of the states' National Pollutant Discharge Elimination System permit programs and other programs.
- Reduce chlorine discharges in critical finfish and shellfish areas. Minimize water pollution incidents and provide adequate response to pollutant spills.
- Manage sewage sludge, dredged spoil and hazardous waste to protect the Bay system.
- Manage groundwater to protect the water quality of the Bay.
- Quantify the impacts and identify the sources of atmospheric inputs on the Bay system.

**COMMITMENT:**

***TO ACHIEVE THIS GOAL WE AGREE:***

- by *July 1988*, to develop, adopt and begin implementation of a basin-wide strategy to equitably achieve by the year 2000 at least a 40 percent reduction of nitrogen and phosphorus entering the main stem of the Chesapeake Bay. The strategy should be based on agreed upon 1985 point source loads and on nonpoint loads in an average rainfall year.
- by *December 1991*, to re-evaluate the 40 percent reduction target based on the results of modeling, research, monitoring and other information available at that time.
- by *December 1988*, to develop, adopt and begin implementation of a basin-wide strategy to achieve a reduction of toxics consistent with the Water Quality Act of 1987 which will ensure protection of human health and living resources. The strategy will cover both point and nonpoint sources, monitoring protocols, enforcement of pretreatment regulations and methods for dealing with in-place toxic sediments where necessary.
- by *July 1988*, to develop and adopt, as required by the Water Quality Act of 1987, a basin-wide implementation strategy for the management and control of conventional pollutants entering the Chesapeake Bay system from point and nonpoint sources.
- by *July 1988*, the Environmental Protection Agency, acting for the federal government, will develop, adopt and begin implementation of a strategy for the control and reduction of point and nonpoint sources of nutrient, toxic and conventional pollution from all federal facilities.

## **POPULATION GROWTH AND DEVELOPMENT**

**GOAL: PLAN FOR AND MANAGE THE ADVERSE ENVIRONMENTAL EFFECTS OF HUMAN POPULATION GROWTH AND LAND DEVELOPMENT IN THE CHESAPEAKE BAY WATERSHED.**

There is a clear correlation between population growth and associated development and environmental degradation in the Chesapeake Bay system. Enhancing, or even maintaining, the quality of the Bay while accommodating growth will frequently involve difficult decisions and restrictions and will require continued and enhanced commitment to proper development standards. The states and federal government will assert the full measure of their authority to mitigate the potential adverse effects of continued growth. • Local jurisdictions have been delegated authority over many decisions regarding growth and development which have both direct and indirect effects on the Chesapeake Bay system and its living resources. The role of local governments in the restoration and protection effort will be given proper recognition and support through state and federal resources. • States will engage in an active partnership with local governments to establish policy guidelines to manage growth and development.

## OBJECTIVES:

- Designate a state-level office responsible for ensuring consistency with this Agreement among the agencies responsible for comprehensive oversight of development activity, including infrastructure planning, capital budgets, land preservation and waste management activities.
- Provide local governments with financial and technical assistance to continue and expand their management efforts.
- Consult with local government representatives in the development of Chesapeake Bay restoration and protection plans and programs.
- Identify and give public recognition to innovative and otherwise noteworthy examples of local government restoration and protection-related programs.
- Assure that government development projects meet all environmental requirements.
- Promote, among local, state and federal governments, and the private sector, the use of innovative techniques to avoid and, where necessary, mitigate the adverse impacts of growth.

## COMMITMENT:

### TO ACHIEVE THIS GOAL WE AGREE:

- to commission a panel of experts to report, by *December 1988*, on anticipated population growth and land development patterns in the Bay region through the year 2020, the infrastructure requirements necessary to serve growth and development, environmental programs needed to improve Bay resources while accommodating growth, alternative means of managing and directing growth and alternative mechanisms for financing governmental services and environmental controls. The panel of experts will consist of twelve members: three each from Virginia, Maryland and Pennsylvania, and one each from the District of Columbia, Environmental Protection Agency and the Chesapeake Bay Commission.
- by *January 1989*, to adopt development policies and guidelines designed to reduce adverse impacts on the water quality and living resources of the Bay, including minimum best management practices for development and to cooperatively assist local governments in evaluating land-use and development decisions within their purview, consistent with the policies and guidelines.
- to evaluate state and federal development projects in light of their potential impacts on the water quality and living resources of the Chesapeake Bay, and design and carry out each state and federal development project so as to serve as a model for the private sector in terms of land-use practices.
- by *December 1988*, to develop a strategy to provide incentives, technical assistance and guidance to local governments to actively encourage them to incorporate protection of tidal and non-tidal wetlands and fragile natural areas in their land-use planning, water and sewer planning, construction and other growth-related management processes.

## PUBLIC INFORMATION, EDUCATION AND PARTICIPATION

GOAL: PROMOTE GREATER UNDERSTANDING AMONG CITIZENS ABOUT THE CHESAPEAKE BAY SYSTEM, THE PROBLEMS FACING IT AND POLICIES AND PROGRAMS DESIGNED TO HELP IT, AND TO FOSTER INDIVIDUAL RESPONSIBILITY AND STEWARDSHIP OF THE BAY'S RESOURCES.

GOAL: PROVIDE INCREASED OPPORTUNITIES FOR CITIZENS TO PARTICIPATE IN DECISIONS AND PROGRAMS AFFECTING THE BAY.

The understanding and support of the general public and interest groups are essential to sustaining the long-term commitment to the restoration and protection of the Chesapeake Bay system and its living resources. Citizens must have opportunities to learn about that system and associated management policies and programs and must be given opportunities to contribute ideas about how best to manage that natural system.

## OBJECTIVES:

- Provide timely information on the progress of the restoration program.



- Assure a continuing process of public input and participation in policy decisions affecting the Bay.
- Enhance Bay-oriented education opportunities to increase public awareness and understanding of the Bay system.
- Provide curricula and field experiences for students.
- Promote opportunities to involve citizens directly in Bay restoration efforts.
- Coordinate the production and distribution of Bay information and education materials.

**COMMITMENT:**

**TO ACHIEVE THESE GOALS WE AGREE:**

- to conduct coordinated education and information programs to inform the general public, local governments, business, students, community associations and others of their roles, responsibilities and opportunities in the restoration and protection effort, and to promote public involvement in the management and decision-making process.
- to provide for public review and comment on all implementation plans developed pursuant to this agreement.
- by *March 1988*, to develop state and federal communication plans for public information, education and participation, and by *May 1988*, to develop a unified, Bay-wide communication plan.
- to promote Chesapeake Bay restoration efforts by establishing an annual Bay-wide series of Chesapeake Bay Watershed Awareness events, to include a Governor's Cup Fishing Tournament.

**PUBLIC ACCESS**

**GOAL: PROMOTE INCREASED OPPORTUNITIES FOR PUBLIC APPRECIATION AND ENJOYMENT OF THE BAY AND ITS TRIBUTARIES.**

Interest in and commitment to the Chesapeake Bay and its tributaries are greatly affected by personal contact with that natural system. Consequently, improved opportunities for access to the shores and waters of the system are essential if public awareness and support are to be maintained and increased.

**OBJECTIVES:**

- Improve and maintain access to the Bay including public beaches, parks and forested lands.
- Improve opportunities for recreational and commercial fishing.
- Secure shoreline acreage to maintain open space and provide opportunities for passive recreation.
- Secure necessary acreage to protect unique habitat and environmentally sensitive areas.

**COMMITMENT:**

**TO ACHIEVE THIS GOAL WE AGREE:**

- to intensify our efforts to improve and expand public access opportunities being made available by the federal government, the states, and local governments, by developing a strategy, which includes an inventory of current access opportunities by *July 1988*, which targets state and federal actions to secure additional tidal shorefront acres by *December 1990* along the Bay and its tributaries.
- by *December 1988*, to prepare a comprehensive guide to access facilities and the natural resource system for the tidal Chesapeake Bay.

**GOVERNANCE**

**GOAL: SUPPORT AND ENHANCE THE PRESENT COMPREHENSIVE, COOPERATIVE AND COORDINATED APPROACH TOWARD MANAGEMENT OF THE CHESAPEAKE BAY SYSTEM.**

**GOAL: PROVIDE FOR CONTINUITY OF MANAGEMENT EFFORTS AND PERPETUATION OF COMMITMENTS NECESSARY TO ENSURE LONG-TERM RESULTS.**

The cooperation necessary to sustain an effective Chesapeake Bay restoration and protection effort requires a formal working arrangement involving the states and the federal government. That institutional arrangement must allow for and promote voluntary individual actions coordinated within a well-defined context of the individual responsibilities and authorities of each state and the federal government. It must also ensure that actions which require a concerted, Bay-wide approach be addressed in common and without duplication. One of the principal functions of the coordinating institution is to develop strategic plans and oversee their implementation, based on advice from the public, from the scientific community and from user groups. • In addition, the coordinating body must exert leadership to marshal public support, and it must be accountable for progress made under the terms of this agreement. The coordinating body will continue to be called the Chesapeake Executive Council. The Chesapeake Executive Council shall be comprised of the Governors, the Mayor of the District of Columbia, the Administrator of the Environmental Protection Agency shall represent the federal government and the Chairman of the Chesapeake Bay Commission shall represent its members.

**OBJECTIVES:**

- Continue to demonstrate strong, regional leadership by convening an annual public meeting of the Chesapeake Executive Council.
- Continue to support the Chesapeake Executive Council and provide for technical and public policy advice by maintaining strong advisory committees.
- Coordinate Bay management activities and develop and maintain effective mechanisms for accountability.
- The Chesapeake Bay Liaison Office shall provide staff support to the Chesapeake Executive Council by providing analyses and data management, and by generating reports related to the overall program. The Implementation Committee shall provide guidance to the CBLO Director in all matters relating to support for the Council and their supporting committees, subcommittees and work groups including the development of all plans and other documents associated with the Council.
- Examine the feasibility of joint funding support of the Chesapeake Bay Liaison Office.
- Track and evaluate activities which may affect estuarine water quality and resources and report at least annually.
- Develop and maintain a coordinated Chesapeake Bay data management system.
- Continue to implement a coordinated Bay-wide monitoring system and to develop a Bay-wide living resources monitoring system.
- Develop and implement a coordinated Bay-wide research program.

**COMMITMENT:**

***TO ACHIEVE THESE GOALS WE AGREE:***

- to develop an annual Chesapeake Bay work plan endorsed by the Chesapeake Executive Council.
- to continue to support Bay-wide environmental monitoring and research to provide the technical and scientific information necessary to support management decisions.
- to strengthen the Chesapeake Bay Liaison Office by assigning, as appropriate, staff persons from each jurisdiction and from participating federal agencies to assist with the technical support functions of that office.
- by July 1988, to develop and adopt a comprehensive research plan to be evaluated and updated annually to address the technical needs of the Chesapeake Bay Program.
- by July 1988, develop a Bay-wide monitoring plan for selected commercially, recreationally and ecologically valuable species.

- by *March 1988*, to establish a local government advisory committee to the Chesapeake Executive Council and charge that committee to develop a strategy for local government participation in the Bay program.
- to consider and review the feasibility of establishing an independent Chesapeake Bay Executive Board.
- by *July 1988*, the Environmental Protection Agency, acting for the *federal* government, will develop a coordinated, federal agency workplan which identifies specific federal programs to be integrated into a coordinated federal effort to support the restoration of the Chesapeake Bay.

***BY THIS AGREEMENT***, we reaffirm our commitment to restore and protect the ecological integrity, productivity and beneficial uses of the Chesapeake Bay system. We agree to report in *January 1989* on progress made in fulfilling the commitments in this agreement, and to consider at that time additional commitments. The implementation strategies which will be developed pursuant to this agreement will be appended as annexes, and annual reports will include an accounting of progress made on each strategy.



**Chesapeake Bay Commission**

**RESOLUTION**

*A legislative commission serving Maryland, Pennsylvania and Virginia.*

**Resolution to the Environmental Protection Agency  
Concerning the Administration of Nutrient  
Management Programs by the Chesapeake Bay  
Jurisdictions  
Adopted by the Chesapeake Bay Commission  
April 29, 1988**

WHEREAS, excess nutrients from nonpoint sources, including agricultural activities, have resulted in degradation of the water quality and living resources of the Chesapeake Bay; and

WHEREAS, by virtue of the commitments contained in the 1987 Chesapeake Bay Agreement, the Bay jurisdictions have reaffirmed their intention to protect and restore the Chesapeake Bay; and

WHEREAS, these jurisdictions have identified the need to accelerate the installation of agricultural best management practices in order to meet the commitment to reduce by 40% nutrients entering the Bay; and

WHEREAS, in order to improve water quality, it is generally necessary to implement a series of best management practices on a particular farm as outlined in a nutrient management plan; and

WHEREAS, installation of best management practices requires a period of several years; and

WHEREAS, long term financial commitments are therefore necessary to ensure that nutrient management plans are fully implemented,

NOW, THEREFORE, BE IT RESOLVED, that, in order to facilitate the continued, effective administration of nutrient management programs by the Chesapeake Bay jurisdictions,



- (1) The Chesapeake Bay Commission urges the Environmental Protection Agency to recognize the importance of ensuring that funds are available for farmers to implement all best management practices required in nutrient management plans to address critical pollution problems; and
- (2) The Commission encourages the EPA to modify any of its regulations governing the Chesapeake Bay Program which are inconsistent with the need to ensure the availability of funds for farmers to implement scheduled best management practices throughout the nutrient management plan contract period which may exceed 12 months or one fiscal year; and
- (3) The Chesapeake Bay jurisdictions be afforded flexibility to operate Chesapeake Bay programs consistent with individual state policies and program needs.

Chesapeake Bay Commission

# RESOLUTION

*A legislative commission serving Maryland, Pennsylvania and Virginia.*

**Resolution to Governor Robert P. Casey Concerning  
Additional Staff Needs to Allow for the Effective  
Implementation of Pennsylvania's Nonpoint Nutrient  
Reduction Strategy  
Adopted by the Chesapeake Bay Commission  
April 29, 1988**

WHEREAS, excess nutrients from nonpoint sources, including agricultural activities, have resulted in degradation of the water quality and living resources of the Chesapeake Bay; and

WHEREAS, by virtue of the commitments contained in the 1987 Chesapeake Bay Agreement, the Bay jurisdictions have reaffirmed their intention to protect and restore the Chesapeake Bay; and

WHEREAS, each jurisdiction has agreed to develop, adopt and begin to implement a basin-wide strategy to equitably achieve by the year 2000 at least a 40 percent reduction of nitrogen and phosphorus entering the main stem of Chesapeake Bay; and

WHEREAS, Pennsylvania has estimated that 67 percent of the controllable phosphorus and 88 percent of the controllable nitrogen load at the fall line originate from urban, agricultural and anthropogenic nonpoint sources; and

WHEREAS, Pennsylvania has recognized in its Draft Nutrient Reduction Strategy that agricultural nonpoint source control programs appear to be the most cost effective means of meeting the state's nutrient reduction goals and that this program must be greatly expanded,

NOW, THEREFORE, BE IT RESOLVED, that, in order to facilitate the effective administration and implementation of Pennsylvania's proposed expanded nonpoint source control programs,

new positions be authorized and funded in Fiscal Year 1989 to allow for the full expansion of Pennsylvania's nutrient management program as planned for in the Draft Nutrient Reduction Strategy in order to fulfill the state's commitments under the terms of the 1987 Chesapeake Bay Agreement. New staffing should include:

- Positions to assist in erosion and sediment control efforts;
- Positions to provide administrative and technical support for the agricultural Financial Assistance Program; and
- Attorneys to work in the area of erosion and sediment control enforcement.

Chesapeake Bay Commission

# RESOLUTION

*A legislative commission serving Maryland, Pennsylvania and Virginia.*

## Resolution Concerning the American Heritage Trust Act of 1988 Adopted by the Chesapeake Bay Commission September 8, 1988

WHEREAS, the federal Land and Water Conservation Fund (LWCF) was established in 1965 to provide a predictable and steady source of monies to the states in order to acquire more than 5.5 million acres of recreation and parklands, forests and wildlife areas, and

WHEREAS, the revenues for the LWCF are generated by both offshore oil and gas leasing and sales of surplus federal real estate and now total some \$900 million a year, and

WHEREAS, as a direct result of the LWCF Pennsylvania, Maryland, Virginia and Washington D.C. have collectively invested over \$428 million for projects that have ensured the preservation of each jurisdiction's recreational and open spaces, and

WHEREAS, since 1980 the commitment to appropriate the use of these funds has seriously declined from an annual peak of \$805 million to less than \$200 million a year and this decline in federal commitment has severely limited the acquisition programs of all of the states in the Bay region, and,

WHEREAS, Representative Morris K. Udall, a key sponsor of original legislation that created the two Funds, introduced the American Heritage Trust Act, H.R. 4127 (S. 2199) which would create a permanent trust account by investing the \$6.2 billion that have accumulated in the LWCF over the past fifteen years into interest bearing public debt securities, and

WHEREAS, the growth of the fund would continue until the amount of interest generated each year by the fund reached at least \$1 billion, at which point the \$900 million obligated to the fund each year would terminate, and the Trust would become entirely self-sustaining, and

WHEREAS, the growing population in the Bay states continues to demand greater capital investment in recreation, conservation and historic preservation, and

WHEREAS, continued federal funding is an essential element in meeting these demands , and

WHEREAS, the signatories of the 1987 Chesapeake Bay Agreement made a firm commitment to improve public access to the Bay through recreational planning and acquisition and to improve water quality, recognizing that open space provides significant buffers for sediment and nutrient pollutant loadings and that both of these commitments would be directly aided by the funding provided by the American Heritage Trust,

NOW, THEREFORE, BE IT RESOLVED, that the Chesapeake Bay Commission requests the Pennsylvania, Maryland and Virginia Congressional Delegations to strongly endorse the Act and encourage the members of the Senate Energy and Natural Resources Committee and the Subcommittee on Public Lands to act swiftly in favor of the American Heritage Trust Act.



Chesapeake Bay Commission

# RESOLUTION

A legislative commission serving Maryland, Pennsylvania and Virginia.

## Resolution Concerning Pesticide Use in the Chesapeake Bay Region Adopted by the Chesapeake Bay Commission September 7, 1989

WHEREAS, the Chesapeake Bay Commission is a participating party to the development of a basinwide strategy for the reduction of toxic pollutants pursuant to the terms of the 1987 Chesapeake Bay Agreement, and

WHEREAS, the misuse as well as the approved use of pesticides have been determined to be a significant source of toxic pollutants to the Bay, and

WHEREAS, the adoption of compatible state policies which comprehensively address pesticide use, storage, transportation and disposal would benefit a strategy for the reduction of pesticide use and residues in the Chesapeake Bay watershed, and

WHEREAS, there is a chronic lack of detailed scientific information concerning the types and numbers of pesticides currently being used in the urban, suburban and rural areas of the Chesapeake Bay watershed, and the effects of pesticide use in general upon the natural resources of the region, and

WHEREAS, there is a lack of clear understanding regarding the potential adverse health effects of certain pesticides and pesticide residues in the waters of the Bay, in groundwater, and in potable water and food supplies, and

WHEREAS, there is a lack of special education programs in the region regarding pesticide use for homeowners to ensure proper use and help eliminate the risk and concern surrounding questions of pest control, and

WHEREAS, integrated pest management holds great promise for improved pest control, reduced pesticide use, and lower pest control costs for farmers and the general public, and

WHEREAS, the Pennsylvania members of the Chesapeake Bay Commission have been instrumental in the support for and development of Crop Management Associations in the Commonwealth, and

WHEREAS, such Associations have been effective in reducing pesticide use while maintaining high levels of agricultural production and in increasing public awareness of and involvement in issues related to pesticide use, and

WHEREAS, the Virginia Pesticide Control Act has been widely recognized as an exemplary approach to pesticide management,

NOW, THEREFORE, BE IT RESOLVED, that the Chesapeake Bay Commission requests the states of Maryland, Virginia and Pennsylvania to work together to develop consistent state strategies for dealing with existing and potential public health and environmental issues associated with the use of pesticides, and of pesticide contamination, and that such strategies include, at a minimum, the following elements:

- A. An interagency and intergovernmental capacity to assess and resolve issues related to the public health and environmental benefits and risks of pesticide use, distribution, labeling, storage, transportation and disposal at the state and local levels;
- B. A policy promoting the reduction of pesticide use which fosters:
  - 1. Research and extension or outreach efforts which explore alternatives to chemical pest control that are both safe and effective,
  - 2. Increased adoption of integrated pest management and further support/research for the use of biological pest controls which stress the application of biological and cultural pest control techniques as prescribed by scientists, agricultural experts and pesticide control specialists to achieve acceptable levels of pest control and reduced costs, and
  - 3. Citizen involvement in the decision-making process regarding methods of pest control utilized in schools, parks, government facilities, highways, beaches and other public places;

C. A system for accurately monitoring pesticide use, contamination, and health and environmental effects, and

BE IT FURTHER RESOLVED, that the Chesapeake Bay Commission endorses the concept of Crop Management Associations as employed within the Commonwealth of Pennsylvania, and encourages the states of Maryland and Virginia to consider similar mechanisms as a means of encouraging the involvement of the agricultural community in issues related to pesticide application and use, and

BE IT FURTHER RESOLVED, that the Chesapeake Bay Commission endorses the objectives of the Virginia Pesticide Control Act and urges the Virginia Pesticide Control Board to consider this resolution and its intent in the development of regulations pursuant to the requirements of that Act, and

BE IT FURTHER RESOLVED, that the Chesapeake Bay Commission encourages the development of a Sensitive Resources Index that would catalogue the sensitive physical and biological resources of the Bay region that may be adversely affected by pesticide use, and the associated development of pest management practices that will substantially reduce or eliminate adverse impacts to these resources which are attributable to pesticide use, and

BE IT FINALLY RESOLVED, that the Chesapeake Bay Commission is committed to working with the legislatures and administrative agencies of Maryland, Virginia and Pennsylvania to ensure that adequate resources are provided at the state and local level for the implementation of ongoing and future Chesapeake Bay pollution control programs that address the problems associated with the use of pesticides.





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**Chesapeake Bay Commission**

**RESOLUTION**

*A legislative commission serving Maryland, Pennsylvania and Virginia.*

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**Resolution Endorsing the Priorities Recommended  
by the Year 2020 Panel  
Adopted by the Chesapeake Bay Commission  
September 7, 1989**

WHEREAS, the Chesapeake Bay Commission, as a signatory to the 1987 Chesapeake Bay Agreement, has recognized the clear correlation between population growth and associated development and environmental degradation in the Chesapeake Bay system, and

WHEREAS, the states and the federal government have agreed to assert the full measure of their authority to mitigate the potential adverse effects of continued growth, and

WHEREAS, a panel of experts was commissioned to report on anticipated population growth and land development patterns in the Bay region through the year 2020, the infrastructure requirements necessary to serve growth and development, environmental programs needed to improve Bay resources while accommodating growth, alternative means of managing and directing growth and alternative mechanisms for financing governmental services and environmental controls, and

WHEREAS, the Chesapeake Bay Commission, as a signatory to the Agreement and member of the Chesapeake Executive Council, was represented on that panel, and

WHEREAS, the report was prepared and delivered to the Chesapeake Executive Council in January of 1989, and

WHEREAS, the Chairman of the Chesapeake Executive Council, having expressed a sense of urgency regarding the recommendations of the Year 2020 Panel, requested the Panel to revisit its recommendations in order to specify a priority among the actions which should be taken and to offer realistic, yet challenging and ambitious deadlines for action, and

WHEREAS, the Panel has completed that assessment and conveyed its findings to the Executive Council by letter of June 8, 1989, and

WHEREAS, the Executive Council will consider the recommendations of the Year 2020 Panel at its meeting in December, 1989, and

WHEREAS, the Panel has identified three of its recommendations as being central to the achievement of the visions which it has developed,

NOW, THEREFORE, BE IT RESOLVED, that the Chesapeake Bay Commission endorses the following priority recommendations of the Year 2020 Panel to the states for initiating responses to the report of the Panel and to building public understanding of growth management issues:

1. Each jurisdiction should establish or designate a commission or agency charged with the responsibility of translating the panel recommendations into action;
2. Each jurisdiction should develop state and regional planning processes and coordinated public investment;
3. Each of the members of the Executive Council should undertake an educational initiative to promote a greater understanding of threats to both the Chesapeake Bay and to our environment in general deriving from the projected growth, and

BE IT FURTHER RESOLVED, that the Chesapeake Bay Commission encourages its member states to act expeditiously to implement the priority recommendations of the Year 2020 Panel and to provide the resources necessary for their implementation, and

BE IT FURTHER RESOLVED, that the staff of the Chesapeake Bay Commission will assist the member states, to the fullest extent possible, in the implementation of the visions and recommended actions of the Panel, particularly its priority recommendations, and

BE IT FINALLY RESOLVED, that the Commission will communicate to the Executive Council its endorsement of the above-cited priority recommendations as well as its general support for the visions described in the Year 2020 Report and the recommendations for transforming those visions into reality.

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## Chesapeake Bay Commission

# RESOLUTION

*A legislative commission serving Maryland, Pennsylvania and Virginia.*

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### Resolution Concerning Pump-out Facilities for the Chesapeake Bay Adopted by the Chesapeake Bay Commission September 8, 1989

WHEREAS, many sources of pollution have contributed to the general decline of water quality in the Chesapeake Bay watershed, and

WHEREAS, minor dischargers, including waste water discharges from commercial and recreational vessels, can, under certain circumstances, have significantly negative impacts on local water quality conditions, and

WHEREAS, the Chesapeake Bay Agreement, to which the Chesapeake Bay Commission is a signatory, has as one of its objectives the elimination of pollutant discharges from recreational boats, and

WHEREAS, the ultimate means of achieving this objective is to have the Chesapeake Bay and its tributaries designated as No Discharge Zones, and

WHEREAS, such designation can only be made following petition to the U.S. Environmental Protection Agency submitted by the Governor or the principal water quality management agency certifying among other things, that the designated waters require greater environmental protection than the applicable federal standard and that adequate and reasonably available pump-out facilities exist for the area so designated, and

WHEREAS, a lack of adequate, reasonably spaced and accessible pump-out facilities has been identified as a significant barrier to the designation of No Discharge Zones in the Chesapeake Bay region, and

WHEREAS, plans for the additional construction of pump-out facilities must consider the carrying capacity of existing land-based treatment facilities, and

WHEREAS, enforcement of existing federal and state statutes and regulations is hampered by a lack of adequate manpower and resources, and

WHEREAS, a concentrated public awareness and education effort directed at the boating public is needed in order to inform the Bay area citizenry of the hazards associated with the improper disposal of vessel-generated wastes,

NOW, THEREFORE, BE IT RESOLVED, that the Chesapeake Bay Commission urges the Bay states to work toward the designation of the Chesapeake Bay and its tributaries as a No Discharge Zone, and

BE IT FURTHER RESOLVED, that the Bay states, as a means of working toward this ultimate goal, identify and include, as part of their next biennial water quality inventory compiled pursuant to Section 305(b) of the Water Quality Act, those waters which, because of water quality, living resources or habitat considerations, might be particularly sensitive to discharges from marine sanitation devices as a way of geographically characterizing the threat associated with boat discharge and identifying those areas most at risk, and

BE IT FURTHER RESOLVED, that the Chesapeake Bay Commission, as a further means of working toward the ultimate goal of designating the Bay and its tributaries a No Discharge Zone, requests each of the Bay states to conduct a study examining the adequacy of existing laws and programs governing the provision of, and public funding for, pump-out facilities and to report their findings to the Commission by January 1, 1991 so that the Chesapeake Bay Commission can ensure that mechanisms exist to provide for adequate pump-out facilities for use by the boating public, and

BE IT FURTHER RESOLVED, that the Commission, as a further means of working toward the designation of the Bay and its tributaries as a No Discharge Zone, calls on the Bay states to thoroughly assess the quantity of sewage being collected at both existing and proposed pump-out facilities in order to determine the adequacy of treatment capabilities on shore once the sewage has been collected, and

BE IT FURTHER RESOLVED, that the appropriate water quality and health agencies of the Bay states, upon determining the volume collected and the destination of such sewage should identify those facilities that do not have adequate treatment capabilities to accommodate such sewage

should the originally used or planned destination facilities prove unable to adequately treat this waste, and

BE IT FURTHER RESOLVED, that the Chesapeake Bay Commission urges the Bay states to aggressively implement education and public awareness programs designed to stimulate increased utilization of pump-out facilities and that each jurisdiction work toward the elimination of any and all disincentives that are discouraging pump-out facility use, and

BE IT FURTHER RESOLVED, that the Bay states should cooperate with the U.S. Coast Guard to seek improvements in the enforcement efforts concerning the proper use of marine sanitation devices, and

BE IT FINALLY RESOLVED, that the Chesapeake Bay Commission will communicate to the Chesapeake Executive Council its recommendations as a way of encouraging all of the members of the Chesapeake Executive Council to actively pursue the elimination of sewage discharge from boats and the eventual designation of the Bay and its tributaries as a No Discharge Zone.



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**APPENDIX D**  
**DOCUMENTS PRODUCED BY THE CHESAPEAKE BAY**  
**COMMISSION DURING 1988 AND 1989**

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- “1988 Legislative Update”
- “1989 Legislative Update”

Summaries prepared by the Commission staff describing legislative actions of importance to the Chesapeake Bay region which were taken by Maryland, Virginia, Pennsylvania, the District of Columbia, and the federal government during 1988 and 1989.

- “Basinwide Nutrient Reduction Strategy: A Summary”, June, 1988
- “Basinwide Conventional Pollutant Strategy: A Summary”, June 1988
- “Draft Chesapeake Bay Stock Assessment Plan: A Summary”, June 1988
- “Resource Management Strategy Schedules: A Summary”, June, 1988
- “Public Access: A Summary”, June 1988

A series of issue papers summarizing several of the early commitment documents produced pursuant to the 1987 Chesapeake Bay Agreement. Each paper includes a critical analysis of an individual strategy and identifies potential legislative and budgetary actions to be taken by the Chesapeake Bay Commission in furtherance of the commitments.

- “Non-Tidal Wetlands Protection Programs for the Chesapeake Bay Region: A Review and Comparison”, September, 1988

A white paper produced by Commission staff providing an overview of the importance of non-tidal wetlands resources, including a review and comparison of wetlands protection programs in place in Maryland, Virginia, Pennsylvania and Delaware during 1988. Staff recommendations for improvements in existing programs are also included.

- “The Development of Effective State Non-Tidal Wetlands Protection Programs: Position Statement”, November 17, 1988.

A position statement adopted by the Chesapeake Bay Commission outlining those elements which should be included in an effective state management program designed to protect non-tidal wetlands.

- “Boat Pump-Out Facilities for the Chesapeake Bay: A Review and Recommendations”, September, 1989

A thorough review of existing state and federal laws and regulations pertaining to marine sanitation devices, boat pump-out facilities in the Bay region and other issues related to waste discharges from recreational and commercial vessels. The white paper includes the Commission’s recommendations for reducing, and working toward the elimination of, pollutant discharges from vessels in the Chesapeake Bay.



- “Oil Spill Liability Statutes and Clean-Up Programs for the Chesapeake Bay and Its Tributaries: A Review and Comparison”, September 1989

A white paper prepared by Commission staff outlining the existing oil spill liability and compensation statutes and clean-up programs in Maryland, Virginia, Pennsylvania and Alaska and a review of the relevant federal programs. Staff recommendations to revise existing law to improve the effectiveness of these programs are included.

- “Oil Spill Prevention Recommendations for the Chesapeake Bay Region”, January 1990

A summary of recommendations compiled by Commission staff, with the assistance of other interested groups and individuals, which are designed to improve the ability of the state and federal governments to prevent an oil spill from occurring in the Chesapeake Bay region. Recommendations are offered in three broad categories: operations external to the vessel, personnel operating the vessel, and design and equipment.

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## APPENDIX E

# DOCUMENTS PRODUCED PURSUANT TO THE 1987 CHESAPEAKE BAY AGREEMENT

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Chesapeake Bay Commission staff participated in the development and review of the following documents which were prepared during 1988 and 1989 in accordance with the commitments in the 1987 Chesapeake Bay Agreement. Summaries of these Commitment Documents have also been produced. All are available from the EPA Chesapeake Bay Liaison Office, 410 Severn Avenue, Annapolis, Maryland 21401.

### COMMITMENT DOCUMENTS

- “Habitat Requirements for Chesapeake Bay Living Resources”, January 1988
- “Baywide Communication Plan”, May 1988
- “Chesapeake Bay: Stock Assessment Plan”, July 1988
- “Chesapeake Bay: Resource Management Strategy Schedules”, July 1988
- “Baywide Nutrient Reduction Strategy”, July 1988
- “Baywide Conventional Pollutants Control Strategy”, July 1988
- “Federal Facilities Strategy”, July 1988
- “Public Access Strategy”, July 1988
- “Comprehensive Research Plan”, July 1988
- “Living Resources Monitoring Plan”, July 1988
- “Federal Workplan”, July 1988
- “Chesapeake Bay: Wetlands Policy”, December 1988
- “Chesapeake Bay Strategy for Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed”, December 1988
- “Chesapeake Bay Basinwide Toxics Reduction Strategy”, December 1988
- “Technical Assistance and Incentives to Local Governments”, December 1988
- “Population Growth and Development in the Chesapeake Bay Watershed to the Year 2020”, The Report of the Year 2020 Panel to the Chesapeake Executive Council , December 1988
- “Chesapeake Bay and Susquehanna River Public Access Guide”, January, 1989
- “Chesapeake Bay Watershed Development Policies and Guidelines”, January, 1989
- “The First Progress Report under the 1987 Chesapeake Bay Agreement”, Chesapeake Executive Council, January, 1989
- “Chesapeake Bay Alosid Management Plan”, July 1989
- “Chesapeake Bay Blue Crab Management Plan”, July 1989
- “Chesapeake Bay Oyster Management Plan”, July 1989
- “Chesapeake Bay Striped Bass Management Plan”, December 1989

## **IMPLEMENTATION COMMITTEE REPORTS**

**“Chesapeake Bay Nonpoint Source Programs”, January 1988**

**“A Commitment Renewed: Restoration Progress and the Course Ahead Under the 1987 Bay Agreement”, June 1988**

