

# MEMBERS AND STAFF



The Hon. Thomas McLain “Mac” Middleton, Chairman \* . . . . Maryland State Senate  
The Hon. Michael W. Brubaker, Vice-Chairman \* . . . . . Senate of Pennsylvania  
The Hon. Mary Margaret Whipple, Vice-Chairman \* . . . . . Senate of Virginia

The Hon. Virginia P. Clagett . . . . . Maryland House of Delegates  
The Hon. John A. Cosgrove \* . . . . . Virginia House of Delegates  
The Hon. Douglas Domenech . . . . . Secretary of Natural Resources, Virginia  
The Hon. Russell H. Fairchild \* . . . . . Pennsylvania House of Representatives  
The Hon. Bernie Fowler . . . . . Maryland Citizen Representative  
The Hon. Brian E. Frosh . . . . . Maryland State Senate  
The Hon. John R. Griffin . . . . . Secretary of Natural Resources, Maryland  
The Hon. Emmett W. Hanger, Jr. . . . . Senate of Virginia  
The Hon. John Hanger . . . . . Secretary of Environmental Protection, Pennsylvania  
The Hon. James W. Hubbard \* . . . . . Maryland House of Delegates  
The Hon. Lynwood W. Lewis, Jr. . . . . Virginia House of Delegates  
The Hon. L. Scott Lingamfelter . . . . . Virginia House of Delegates  
The Hon. John Reynolds . . . . . Virginia Citizen Representative  
The Hon. P. Michael Sturla . . . . . Pennsylvania House of Representatives  
The Hon. James Wansacz . . . . . Pennsylvania House of Representatives  
The Hon. Michael L. Waugh . . . . . Senate of Pennsylvania  
The Hon. George B. Wolff . . . . . Pennsylvania Citizen Representative  
The Hon. John F. Wood, Jr. . . . . Maryland House of Delegates

Rear Admiral Mark S. Boensel . . . . . Naval Liaison

\* Executive Committee Member (two officers from each state)

## STAFF

Ann Pesiri Swanson . . . . . Executive Director  
Bevin A. Buchheister . . . . . Maryland Director (beginning August 2010)  
Suzan Bulbulkaya . . . . . Virginia Director  
Marel A. Raub . . . . . Pennsylvania Director  
Matthew P. Mullin . . . . . Maryland Director (through May 2010)  
Paula W. Hose . . . . . Administrative Officer

# THE COMMISSION'S WORK IN 2010

**T**he Commission in 2010 took the opportunity to reflect on past work and to chart its course under a new federal regulatory framework. We investigated the past decade of land conservation in the watershed and published a report with a set of recommendations to continue to build on our successes. We also completed a four-year project analyzing environmental impacts of an emerging regional biofuels industry and published a third report in our biofuels series.

The Commission continued to champion new technology to improve water quality by supporting two promising efforts. We worked with the National Aeronautics and Space Administration, the U.S. Navy and state officials to establish a pilot project in the Chesapeake Bay to convert wastewater into biofuels through the use of algae. The Commission also advocated for creation of a joint federal-state technology fund to aid deployment of projects like the proposed manure-to-energy plant in Pennsylvania that will use gasification technology to process manure from 5 million layer hens into energy and mineral byproducts.

Increased drilling for Marcellus Shale natural gas in the northwestern reaches of the watershed raised questions about impacts to water quality both locally and downstream. In October, the Pennsylvania Department of Conservation and Natural Resources

invited Commission members to tour drill sites and speak with representatives of state agencies, the Susquehanna River Basin Commission and the energy industry. Members discussed the environmental risks of drilling and the existing regulatory requirements, and explored potential policy options.

## FEDERAL ACTION

In the federal arena, the Commission continued to advocate for federal funding for upgrades to the Blue Plains Wastewater Treatment Plant in Washington,

D.C., that will reduce annual nitrogen loads to the Bay by up to four million pounds. We also supported a successful bill sponsored by U.S. Senator Benjamin L. Cardin (D-Md.) that requires the federal government to pay stormwater fees assessed by localities.



In December, members of the Commission's Executive Committee and staff met in Washington, D.C., with U.S. Environmental Protection Agency (EPA) Administrator Lisa Jackson and EPA Bay Program leaders to discuss the unique role the Commission plays in the Bay Program by facilitating the exchange of information and policy recommendations between federal and state agencies, legislators and constituents; by developing and promoting legislation to benefit the Bay; and by advocating for budget support for the Bay states.

## STATE ACTION

Commission members championed a variety of successful bills in 2010 to support Bay restoration goals at the state level. The Maryland Delegation supported measures to prevent those convicted of violating fisheries laws from receiving a transferred license; to create a Sustainable Growth Commission; and to promote revitalization of urban infrastructure by broadening the Heritage Tax Credit.

In Virginia, Delegation members sponsored bills to improve the documentation of voluntary best management practices on farm and forest lands; to authorize a bonding authority to fund oyster restoration; to create a \$500 green jobs tax credit; to expand nutrient trading; and to provide future financing for stormwater controls.

In Pennsylvania, Commission members supported passage of SR 215 to direct the Legislative Budget and Finance Committee to study the cost of agricultural compliance under the proposed Total Maximum Daily Load (TMDL).



# WATER QUALITY

In 2010, the Chesapeake Bay watershed states confronted a new level of accountability for achieving water quality. The Total Maximum Daily Load (TMDL), mandated under the Federal Clean Water Act and administered by the U.S. Environmental Protection Agency, establishes enforceable pollution reduction allocations for nitrogen, phosphorus and sediment to meet water quality standards.

## CHESAPEAKE TMDL

The Chesapeake TMDL covers a larger area than any other TMDL in the nation and is more detailed and more ambitious than any other. Because of the unique circumstances surrounding the Chesapeake — its expanse, its multistate watershed, a 30-year history of restoration efforts, and vast amounts of scientific data — the states were required to provide “reasonable assurance” that water quality would in fact improve. EPA’s expectations of the states included an implementation deadline of 2025, with incremental two-year milestones and an interim deadline of 60 percent implementation by 2017. The milestones will guide and measure progress, improve accountability and allow flexibility to incorporate new information and technology over time.

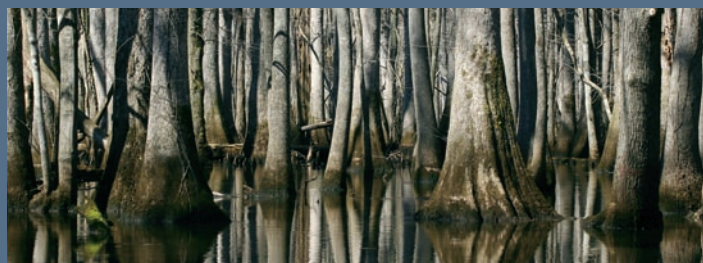
States were challenged to develop Watershed Implementation Plans (WIPs) to outline control measures that would be implemented over 15 years to achieve the necessary reductions from point sources — such as wastewater treatment plants, municipal separate storm sewer systems (MS4) and concentrated animal feeding operations — all of which are currently regulated through discharge permits under the Clean Water Act, and nonpoint sources — such as runoff from agricultural fields or lawns — which are addressed through state laws and voluntary programs.

## COMMISSION’S GUIDING PRINCIPLES

To help establish and implement the Bay TMDL, the Chesapeake Bay Commission developed a set of ten guiding principles that included the 2025 implementation deadline; the development of state-led WIPs; and the system of two-year milestones and accountability. The other guiding principles were:

- Pollution allocations based on science and principles of equity

- Inclusion of all sources when accounting for pollution loads
  - Allowances and accounting for growth
  - Improved tracking and credit for non-cost-shared agricultural conservation practices
  - A “safe harbor” for farmers in compliance
  - Technical assistance for farmers and localities
  - An expanding market for nutrient trading
- The Commission communicated these principles to Congress at a Congressional Bay Task Force meeting in May. The principles were invoked during discussions of S. 1816/H.R. 3852, the Chesapeake Clean Water and Ecosystem Restoration Act, introduced in 2009 by Senator Cardin and U.S. Rep. Elijah Cummings (D-Md.). The principles also informed discussion of H.R. 5509, the Chesapeake Bay Program Reauthorization and Improvement



Act, introduced by U.S. Rep. Tim Holden (D-Pa.) in July 2010. The Commission worked to incorporate concerns of farmers and environmentalists into these bills, but neither bill passed.

At the state level, the principles guided Commission input during the WIP development process. Formal stakeholder advisory groups were created in Pennsylvania, Virginia and Maryland in which Commission staff were active participants. The Commission also hosted EPA-led briefings for key state legislative leaders to inform them of the TMDL and WIP process and potential state legislative actions. In November, the Commission’s state delegations considered legislative initiatives that surfaced during the WIP development process and identified potential legislation. The Commission understands the important role of legislation and budgets in implementation of the WIPs and will continue to work with the states and federal government to successfully meet our water quality goals for the Chesapeake.

# LAND CONSERVATION

Commission states met a significant goal of the *Chesapeake 2000* agreement in 2010 by permanently preserving more than 20 percent of the land area — more than 1.24 million acres — of the Bay watershed in Pennsylvania, Maryland, Virginia and the District of Columbia. This landmark accomplishment was aided by the 2001 Commission report *Keeping Our Commitment: Preserving Land in the Chesapeake Watershed*, which calculated for the first time the total watershed acreage, existing protected lands and the additional acreage needed to reach the 20 percent goal, and identified policy and financing strategies to achieve the goal.

## THE NEW GOALS

At its May meeting, the Commission briefly celebrated the region's success and quickly turned its attention to a new set of land conservation goals: preserving 695,000 acres of high-quality forest in the six watershed states by 2020 set by the Chesapeake Executive Council in 2006; Governor Bob McDonnell's goal to conserve 400,000 acres in Virginia during his administration; and conservation of two million acres and the establishment of 300 public access points by 2025 called for in the 2010 Restoration and Protection Strategy to implement President Obama's Chesapeake Bay Executive Order.

## MAINTAINING MOMENTUM

To assist in reaching these ambitious new goals, the Commission partnered with the Chesapeake Conservancy to study the capabilities and needs of the region's land conservation programs. In December, the Commission and the Conservancy published *Conserving Chesapeake Landscapes: Protecting Our Investments, Securing Future Progress*, which focuses on building upon policy success and presents state-specific recommendations for achieving the Bay's new land conservation goals.

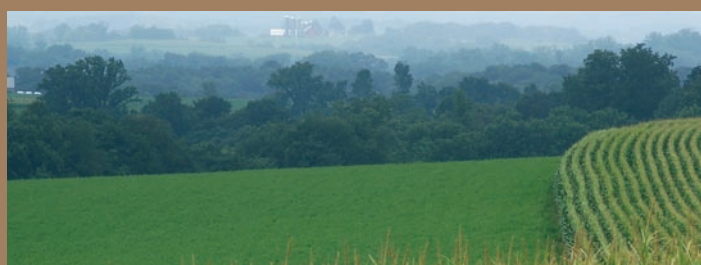
A select Advisory Panel of conservation leaders from throughout the watershed guided the project, which was informed by focus groups representing working lands, ecosystem services and local governments. The panel's principal recommendations were that states must maintain and over time increase state conservation programs; that the federal government should

increase federal investment; that everyone should work together to sustain and grow local programs; and that the states should work in concert to foster land conservation through the growth of ecosystem markets such as nutrient trading.

## ENSURING REGIONAL SUCCESS

The report presented six regional strategies for action:

- States should focus on preserving working lands, since well-managed farms and forests



provide economic, cultural and environmental benefits.

- To maximize water quality benefits, states should work with farm and forest owners to carry out best management practices on conserved lands.
- To establish 300 new public access sites, states should promote a combination of policy initiatives with landowner incentives and volunteer actions.
- State, local and non-profit land protection programs should be strengthened through a combination of dedicated revenue sources, tax incentives and market-driven approaches.
- Federal land conservation programs should be coordinated to become more efficient and effective, and programs such as the Land and Water Conservation Fund should be fully funded.
- States and the federal government should support the emerging role of the private sector to invest in ecosystem markets that could work to conserve land through the production and sale of pollution credits.

Commission member states boast three of the most successful land conservation programs in the nation. By continuing to collaborate with the federal government, localities and land trusts, by increasing partnership with the private sector involved in developing ecosystem services, and by following

# BIOFUELS

In January 2010 the Commission partnered with the Commonwealth of Pennsylvania to produce the third report in a series on the challenges and opportunities presented by biofuels.

The latest report focuses on “advanced biofuels” produced from feedstocks like switchgrass, woody materials or winter crops that don’t compete with food and feed commodities. Project partners were asked to identify a regional advanced biofuels production goal, focus on near-term policy priorities and reconvene a select Biofuels Advisory Panel to provide guidance and counsel. The report, *Chesapeake Biofuel Policies: Balancing Energy, Economy and Environment*, recommended five areas for action.

## A TARGET AND A STRATEGY

States should officially adopt a regional advanced biofuel production target of 500 million gallons per year and set supporting state-specific production goals. Panel members estimated that as many as 18,600 jobs in all sectors of the

economy would be created if biofuel refineries were put in place to handle this production level. State conservation and forestry agencies should work with land grant institutions, federal partners and non-governmental organizations to develop guidelines for removal of crop and forest residues that are protective of both soil and water quality. Underutilized winter crops, planted to protect water quality, should be used as a biofuel feedstock, which would provide a market-based incentive for increased plantings. States in the region should work together to prohibit the use of potentially invasive species as biofuel feedstocks, and to identify and promote species that can be safely introduced. A Regional Council for Bioenergy Development should be established to promote collaboration among jurisdictions and



integrate the issues of biofuels and environmental improvement with other regional priorities.

As a result of this report, Pennsylvania Secretary of Agriculture Russell Redding established a Regional Council and briefed Commission members on its creation at the Commission’s September meeting. Pennsylvania Governor Ed Rendell invited the governors of the Bay states to appoint members to serve on the council. It will be Pennsylvania’s responsibility to continue to lead the biofuels council or to pass the baton to another Bay state.

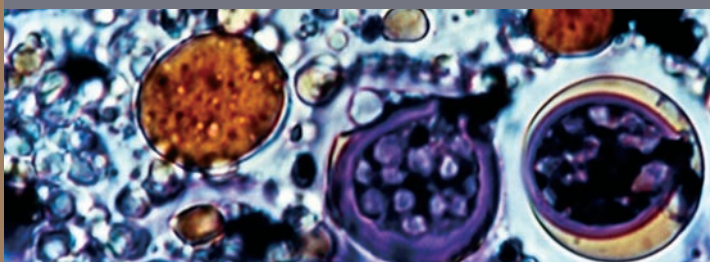
## SUPPORTIVE STATE LEGISLATION

Commission members sponsored several bills to promote biofuels development in the region during the 2010 session. In Pennsylvania, Senator Mike Waugh introduced SB 698 to establish the Pennsylvania Farms to Fuels Initiative, which would provide incentive payments to farmers to transition to a bioenergy crop and provide funds to Conservation Districts to provide technical assistance to farmers. The bill remained in the Appropriations Committee and was not presented for a vote.

Maryland adopted the Maryland Clean Energy Incentives Act of 2010 (SB 287 / HB 464). The measure extended a tax credit program that offers a financial incentive needed for the growth of the renewable energy market during the industry’s beginning stages.

The Virginia Assembly adopted SB 272, sponsored by Senator Mary Margaret Whipple, that requires the state to establish guidelines for state agencies to purchase diesel fuel containing at least two percent biodiesel for use in on-road vehicles.

Given the continuing budget challenges facing states in the region, policies that promote multiple economic, environmental and energy benefits, such



# STATE OF THE WATERSHED

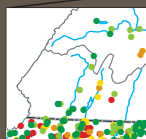
The state of the Chesapeake Bay and its watershed is not good. A Chesapeake Bay Program study of freshwater streams in the watershed found that 5,976 of the 10,833 water samples reviewed were rated as poor or very poor quality (see map). Less than half the samples were rated as fair, good or excellent, with forested areas boasting the highest concentration of good or excellent results. For the Bay as a whole, the Chesapeake Bay Program determined that only 45 percent of the goals it has set for a healthy ecosystem have been achieved. The Chesapeake continued to experience poor overall water quality, degraded habitats and low populations of many fish and shellfish species. However, that 45 percent rating was up from 38 percent in 2008, mainly due to a large increase in the blue crab population resulting from effective management efforts, a resurgence of grass beds in the Bay's shallows, and improvements in water clarity and dissolved oxygen levels.

## HEALTH OF FRESHWATER STREAMS IN THE WATERSHED

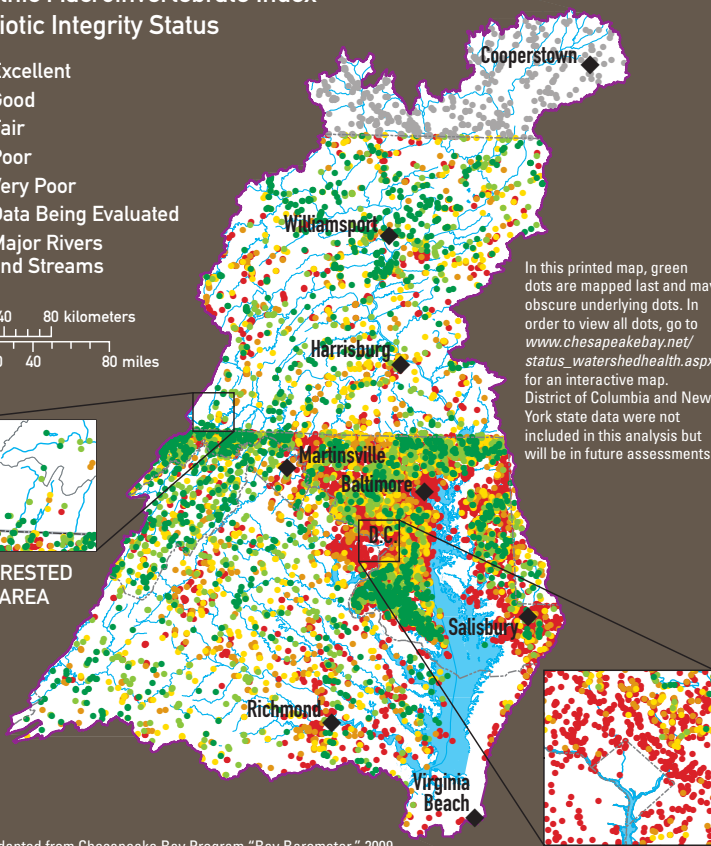
### Benthic Macroinvertebrate Index of Biotic Integrity Status

- Excellent
- Good
- Fair
- Poor
- Very Poor
- Data Being Evaluated
- Major Rivers and Streams

0 20 40 80 kilometers  
0 20 40 80 miles



FORESTED AREA



Map adapted from Chesapeake Bay Program "Bay Barometer," 2009  
DATA SOURCES: 2000–2008 biological, chemical and physical habitat data from: Maryland Department of Natural Resources; Pennsylvania Department of Environmental Protection; Virginia Department of Environmental Protection; Delaware Department of Natural Resources and Environmental Control; Prince Georges and Montgomery Counties, Md.; Fairfax County, Va.; Susquehanna River Basin Commission; United States Forest Service; Virginia Commonwealth University INSTAR program; U.S. EPA. Disclaimer: [www.chesapeakebay.net/termsfuse.htm](http://www.chesapeakebay.net/termsfuse.htm)

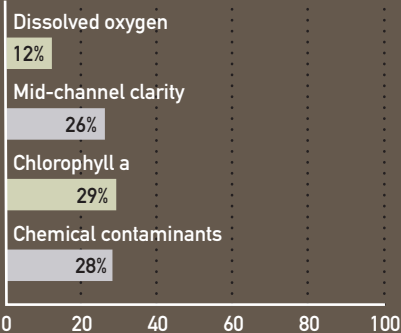
URBAN AREA

## BAY HEALTH



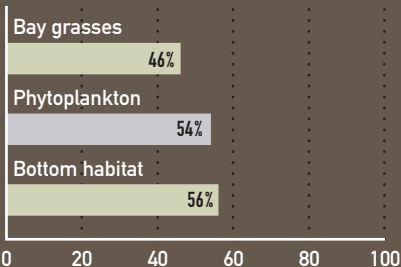
### WATER QUALITY

24 percent of goals achieved



### HABITAT AND LOWER FOOD WEB

52 percent of goals achieved

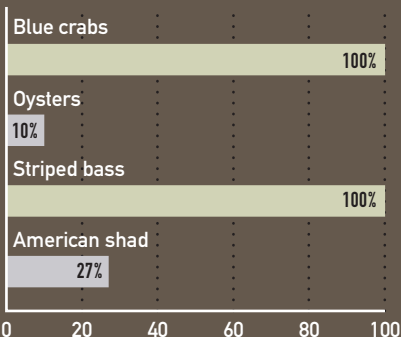


## FACTORS AFFECTING THE BAY AND WATERSHED

POLLUTANTS	LAND USE	NATURAL FACTORS	OTHER PRESSURES
Nitrogen	Population	Weather	Climate change
Phosphorus	Impervious surface	River flow	Invasive species
Sediment	Forest cover		Fisheries harvest
Chemical contaminants			

### FISH AND SHELLFISH

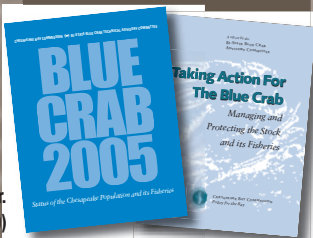
59 percent of goals achieved



# 30 YEARS OF LEGISLATION AND POLICY



**Va. Sen. Joseph V. Gartin, Jr.**  
(1980–1999)

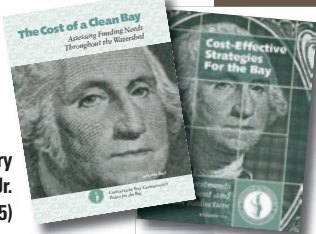


**Md. Del. Michael H. Weir**  
(1983–2002)

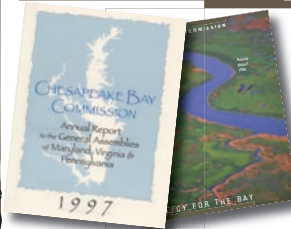


**Pa. Rep. Arthur D. Hershey**  
(1995–2009)

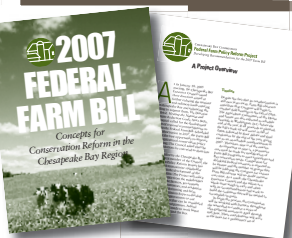
**Va. Del. and Secretary  
W. Tayloe Murphy Jr.**  
(1982–1999 and 2002–2005)



**Pa. Rep. Kenneth J. Cole**  
(1985–1992)



**Va. Del. Robert S. Bloxom**  
(1980–2003)



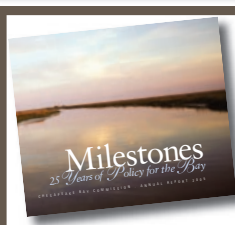
**Md. Del. Thomas Rymer**  
(1983–1989)

**Staying  
the Course**

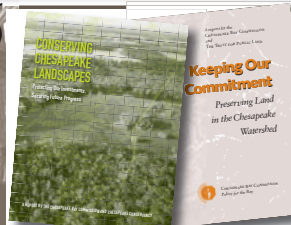


Over three decades, the Commission has earned a reputation as an effective catalyst for Bay restoration. Addressing environmental issues as wide ranging and complex as the watershed itself, the Commission seeks out the best science, the most innovative and cost-effective strategies and the most productive legislative solutions for air, land, water and living resources. This 30th Anniversary Annual Report is dedicated to the more than 80 public leaders who have served as Commission members since 1980, and to the hundreds of dedicated scientists, economists, advocates and others dedicated to the Chesapeake and its watershed who have generously given their time to inform and support our work.

**Va. Sen. Bill Bolling**  
(1996–2004)



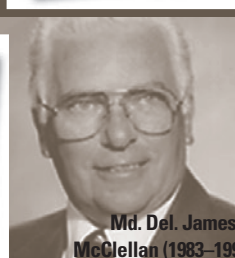
**Pa. Sen. Noah W. Wenger**  
(1985–2006)



**Pa. Sen. Richard A. Tilghman**  
(1985–1992 and 1995–2001)



**Md. Del. James E. McClellan** (1983–1994)



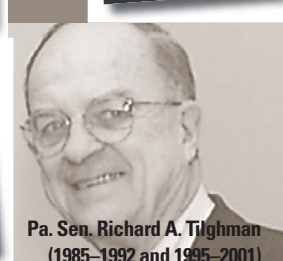
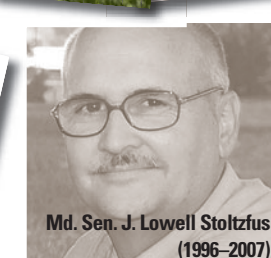
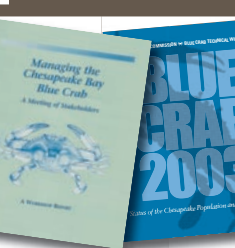
**Md. Sen. Gerald W. Winegrad**  
(1983–1994)



**Pa. Citizen Rep. George B. Wolff** (1985–2010)



**Va. Del. Thelma Drake**  
(2000–2004)



# ABOUT THE COMMISSION

## CHESAPEAKE BAY COMMISSION 2010



**T**he Commission is a policy leader in the restoration of the Chesapeake Bay. Representing the General Assemblies of three member states – Maryland, Pennsylvania and Virginia – the 21 members of the Commission include 15 state legislators, three cabinet-level secretaries representing their governors, and three citizen representatives. The full range of urban, suburban and rural life enjoyed throughout the watershed is represented on this bipartisan Commission, with each member contributing his or her unique perspective, knowledge and expertise.

Individually, the members represent distinct areas of the watershed and bring an intimate knowledge of the local residents and their social, economic and environmental challenges. Collectively, the members share the perspective of the full watershed and provide the least parochial and most comprehensive outlook among the leaders of the Chesapeake Bay Program.

As a signatory to all the Chesapeake Bay Agreements and as an original member of the Chesapeake Executive Council and the Bay Program, the Commission promotes Baywide laws, policies, budgets and programs at both the state and federal levels. The Commission excels at forging diverse partnerships representing multiple states and all levels of government, thus playing a vital role in unifying the watershed.

A new regulatory framework under the federal Chesapeake Bay Total Maximum Daily Load (TMDL) provides an important opportunity to accelerate the Bay restoration effort. The political and economic challenges of implementation mean that the Commission's role in the legislative and budget process is now more critical than ever. As it enters its fourth decade, the Commission will continue to draw on the diverse strengths and experiences of its members and partners as it promotes enactment of effective protections for the Chesapeake and its watershed.



**Chesapeake Bay Commission**  
*Policy for the Bay*

# 30 Years of Policy for the Bay

