

An aerial photograph of the Chesapeake Bay watershed, showing a complex network of rivers and streams flowing into the bay. The land is a mix of green and brown, indicating a mix of forested and agricultural areas. The water in the bay is a light blue-grey color.

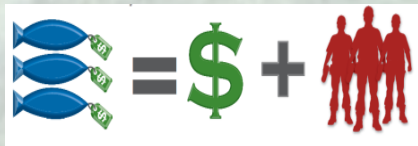
Restoration and Governance of the Chesapeake Bay Program

**Robert M. Summers, Ph.D.
Secretary
Maryland Department of the Environment**

The Chesapeake Bay is the economic engine of the region It has been valued at over one trillion dollars related to fishing, tourism, property values, and shipping activities.



INVESTMENT: \$1 of water and sewer infrastructure investment increases private output (Gross Domestic Product) in the long term by \$6.35.



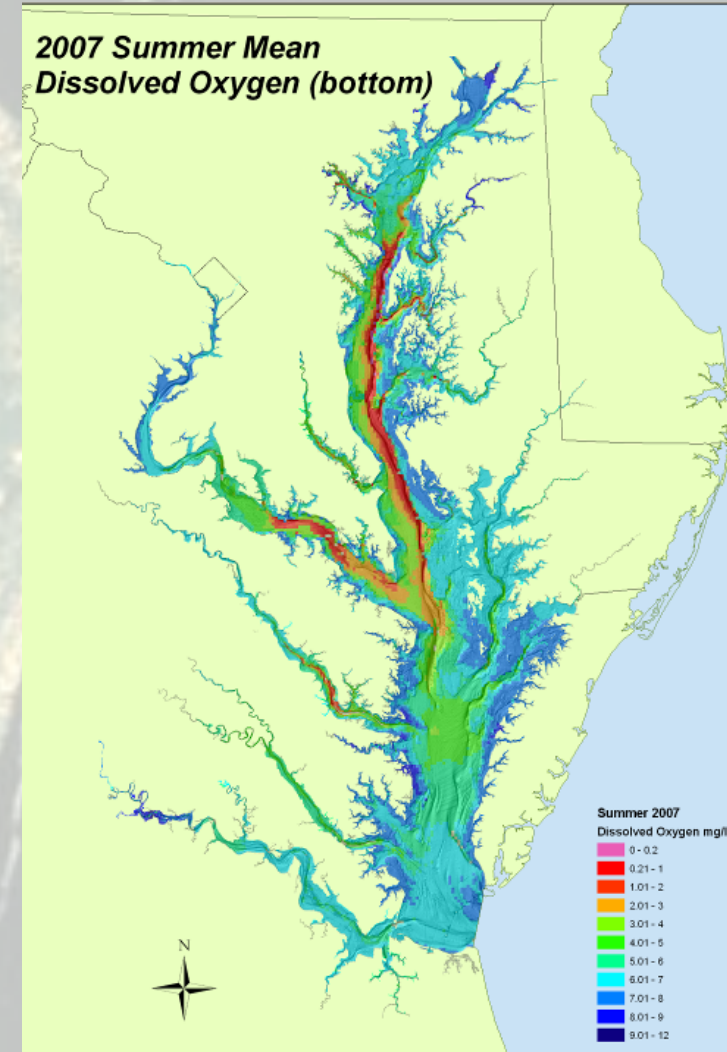
FISHERIES: Commercial seafood industry in Maryland and Virginia contributed \$3.39 billion in sales, \$890 million in income, and almost 34,000 jobs to the local economy. (2009 Fisheries Economics of the U.S. report)



PROPERTY VALUES: An EPA study indicated that clean water can increase the value of single family homes up to 4,000 feet from the shoreline by up to 25 percent.

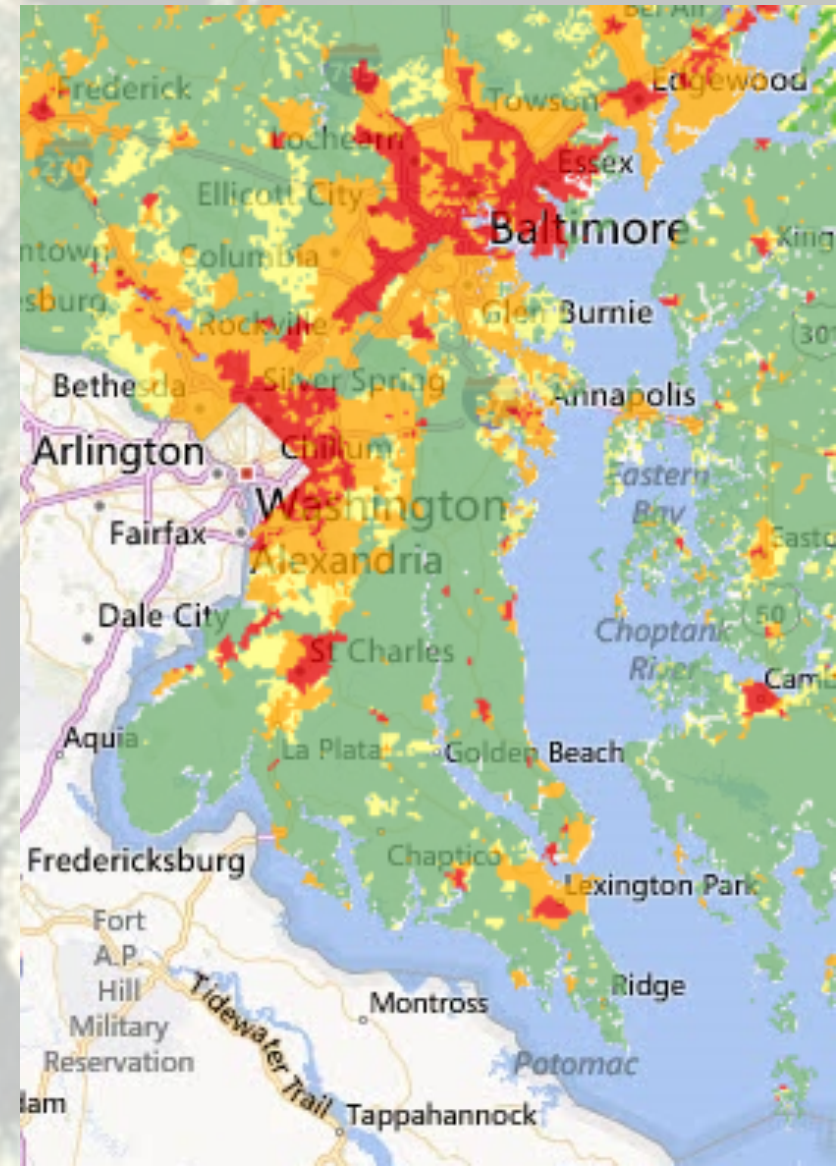
Chesapeake Bay Challenges:

- water quality impaired by pollution
 - Extensive low to no summer dissolved oxygen conditions
- historic overfishing
- population growth
- poor land use management
- loss of habitat
- invasive species

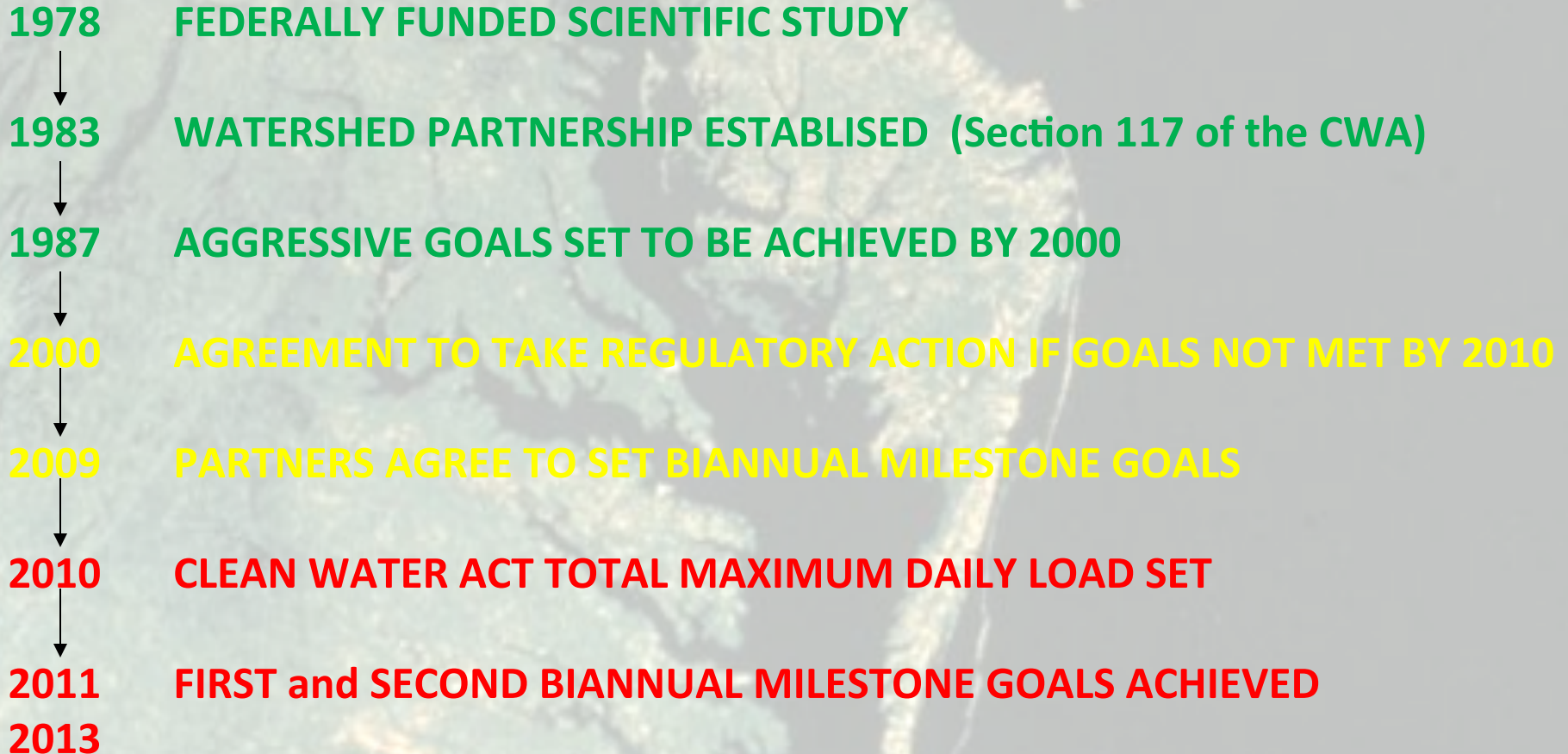


Baltimore – Washington Metropolitan Region

- Population 9,331,587
- Maryland, Virginia and Washington, D.C.
- Baltimore and 10 MD Counties
- Alexandria and 3 VA Counties
- All located on Chesapeake Bay and its tributaries



Evolution of the Chesapeake Bay Program

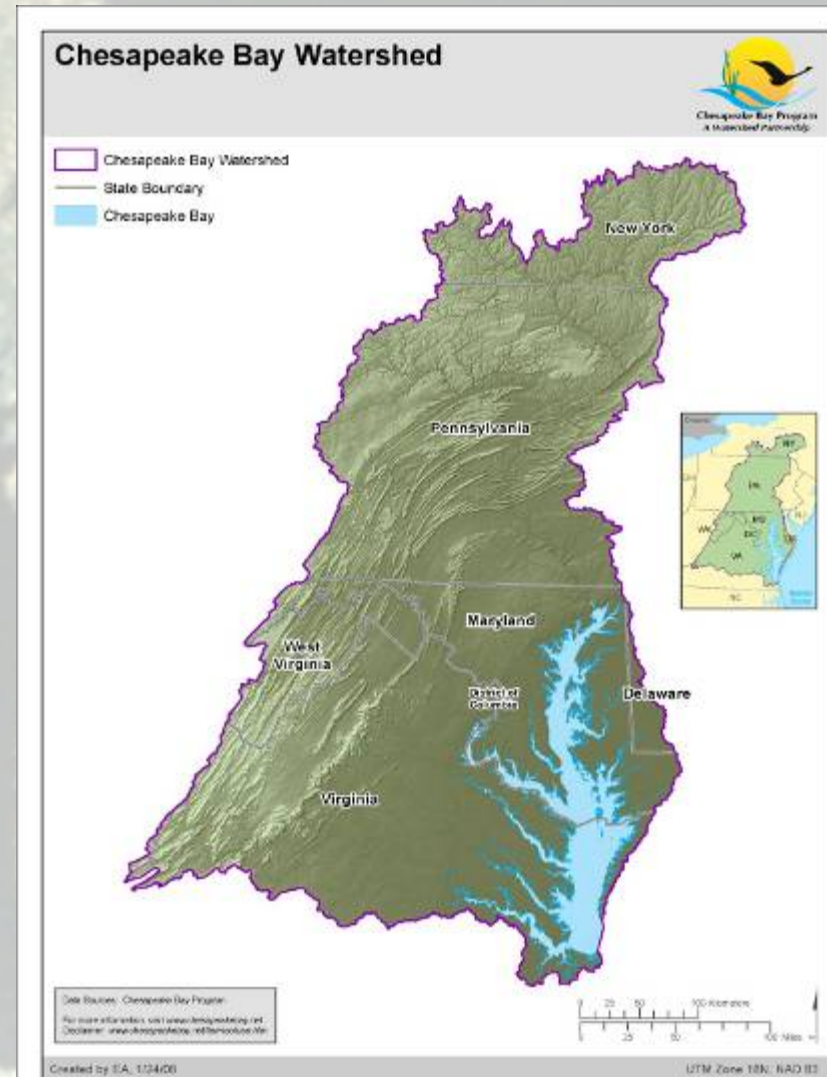


Long-term goals alone are not enough

- Two prior long-term commitments for Bay Water Quality Restoration were not met:
 - 1987: 40% nutrient reduction by 2000
 - 2000: List of commitments including water quality restoration to be achieved by 2010 or TMDL would ensue
- Beginning in 2009, set 2-year milestone goals, with ultimate goal of 2025.
- Reporting of progress to the public

Chesapeake Bay TMDL

- Establishes ‘pollution loading caps’ for N, P, and sediment to meet state and federal water quality standards
- Requires State and local watershed implementation plans for all six Bay states and the District of Columbia
- TMDL document published December 31, 2010
- Implementation must be completed by December 31, 2025

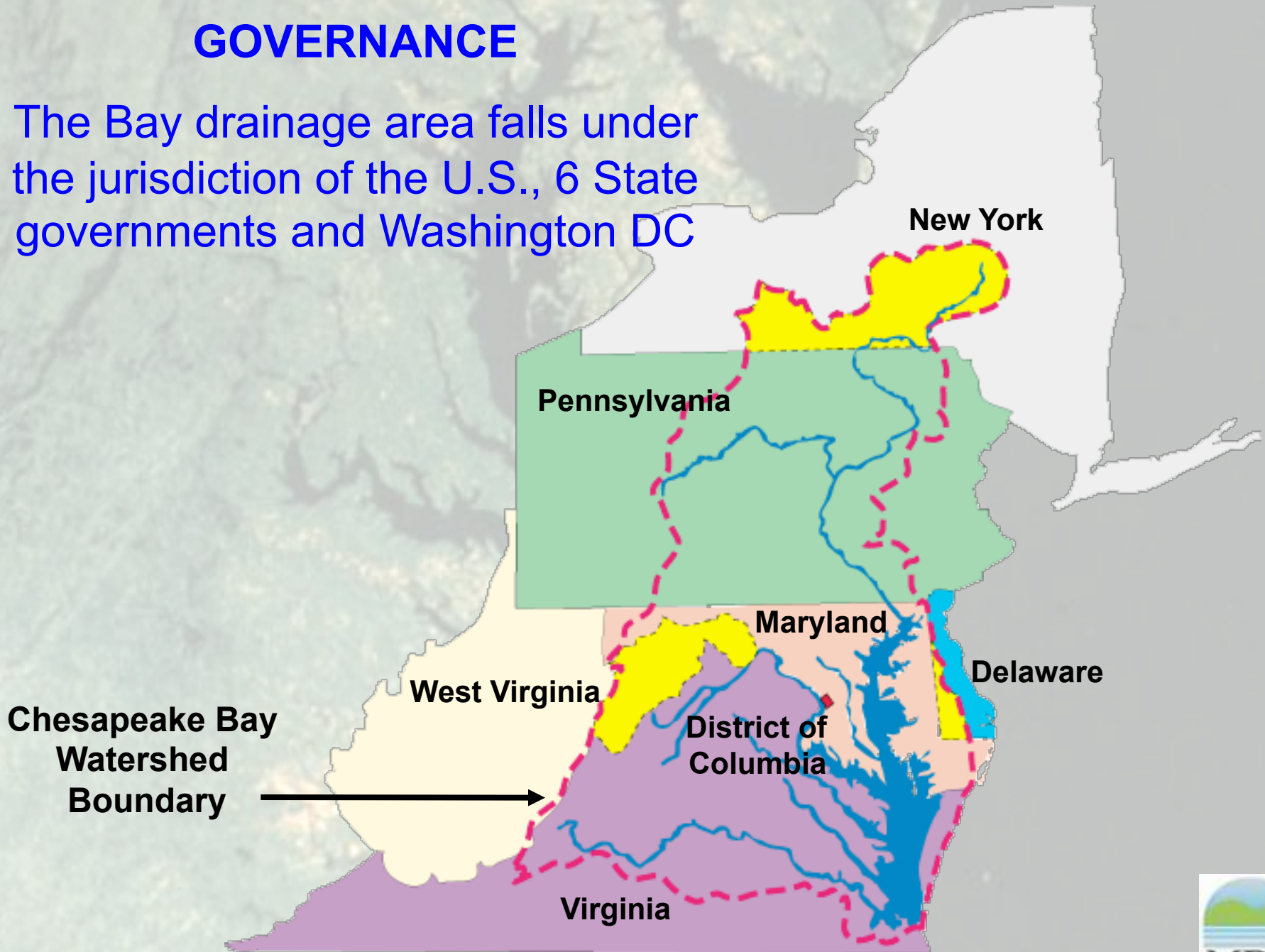


Detailed Watershed Implementation Plans

- Sets specific nutrient and sediment goals (allocations) for each source sector (sewage treatment plants, urban runoff, agricultural runoff, etc.) and each sub-watershed in the Bay.
- Describes how those allocations will be achieved in each sector (e.g., major sewage treatment plants will be upgraded to achieve Enhanced Nutrient Removal).
- Sets 2-year Milestone Goals for each sector to ensure TMDL is achieved on schedule.
- Requires detailed reporting of progress to the public.

GOVERNANCE

The Bay drainage area falls under the jurisdiction of the U.S., 6 State governments and Washington DC



National, State and Local Governance



Source: ChooseCleanWater.org

Each State has many local governments: Counties, Municipalities, Townships

There are over 1,800 local governments in the watershed

Representing 17 million people

Federal Clean Water Act

- The Clean Water Act (CWA) of 1977 is an amendment to the Water Pollution Control Act of 1972 that sets the basic structure for regulating discharges of pollutants to waters of the United States

Permitting, administration
and enforcement **delegated to
state governments**





Implementation of basic pollution control measures **by local governments and private sector** with **State and Federal Funding**

- National Pollution Discharge Elimination System (NPDES) Permits:
 - 1970' s: treatment of municipal and industrial wastewater discharges
 - 1980' s: pollution control measures for large and medium sized stormwater systems
 - 1990' s: pollution control measures for concentrated animal feeding operations (CAFOs)

Implementation of basic pollution control measures

- Federally-funded construction grants program for public wastewater treatment systems
- State Revolving Loan Fund (SRF)
- **Local wastewater utility fees paid by businesses and citizens**



Chesapeake Bay Program Governance



Chesapeake Bay Program

A Watershed Partnership

- **Executive Council** – Governors, Mayor, Chair of the Bay Commission and Administrator of U.S. EPA
- **Principal's Staff Committee** – Cabinet Secretaries, Director of DC Health Dept., Directors of the Bay Commission and EPA Bay Program
- **Management Board** – Agency staff, interest groups
- **Goal Implementation Teams** – Monitoring, Modeling, Data Management, Nutrients, Toxics, etc.



Public Engagement

Advisory Committee representatives appointed by the members of the Bay Program Executive Council:

- Citizens' Advisory Committee
 - Citizens representing businesses, environmental groups and agricultural interests
- Local Government Advisory Committee
 - Local political leaders
- Scientific and Technical Advisory Committee
 - Scientific and technical experts

Maryland Bay Governance

- Governor
- Bay Cabinet
 - Environment
 - Natural Resources
 - Agriculture
 - Planning
 - University of Maryland
- BayStat
- County and municipal governments

Governor Martin O'Malley
Lt. Governor Anthony G. Brown



University of Maryland
CENTER FOR ENVIRONMENTAL SCIENCE



Getting to the Goal

Differences – understand that all partners have different interests that need to be met, and meet them

Consensus – seek to find common ground for agreement and be willing to live with an outcome even if you would choose another way

Persistence – the closer you get to the goal, the harder it will become to get it done.



Getting to the Goal

Time

✓ **CAUTION:** dates on calendar are closer than they appear

✓ Be realistic in setting timelines. Build in additional time just in case

✓ Establish a sense of **URGENCY**



Transparent public reporting to ensure accountability



BAYSTAT



Problem Solver | Maryland.gov | Online Services | State Agencies | Phone Directory

Search

Email Friend print page

SG&G GREENPRINT AGPRINT TREES OYSTERS STREAMHEALTH BAYSTAT

Current Health

Causes of the Problems

Solutions

Trust Fund

Tributary Teams

GET INVOLVED

Welcome

How to Navigate Site

A Message from the Governor

Executive Order (pdf)

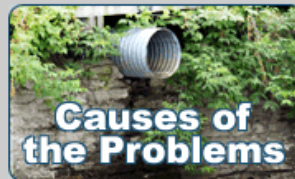
Fact Sheet (pdf)

BayStat and Land Conservation

Oysters



Current Health



Causes of the Problems



Solutions

Office of the GOVERNOR



Governor Martin O'Malley

Chesapeake Bay Blue Crab Population Is At Its Highest Level Since 1997

Annual Bay-Wide Winter Dredge Survey Results Indicate 60% Increase; 658 Million Crabs Show Bi-State Management Actions Continue to Improve Abundance

The results of the most recent winter dredge survey show a 60% increase in Maryland's crab population. The survey indicates that 2008 management measures put into place through a

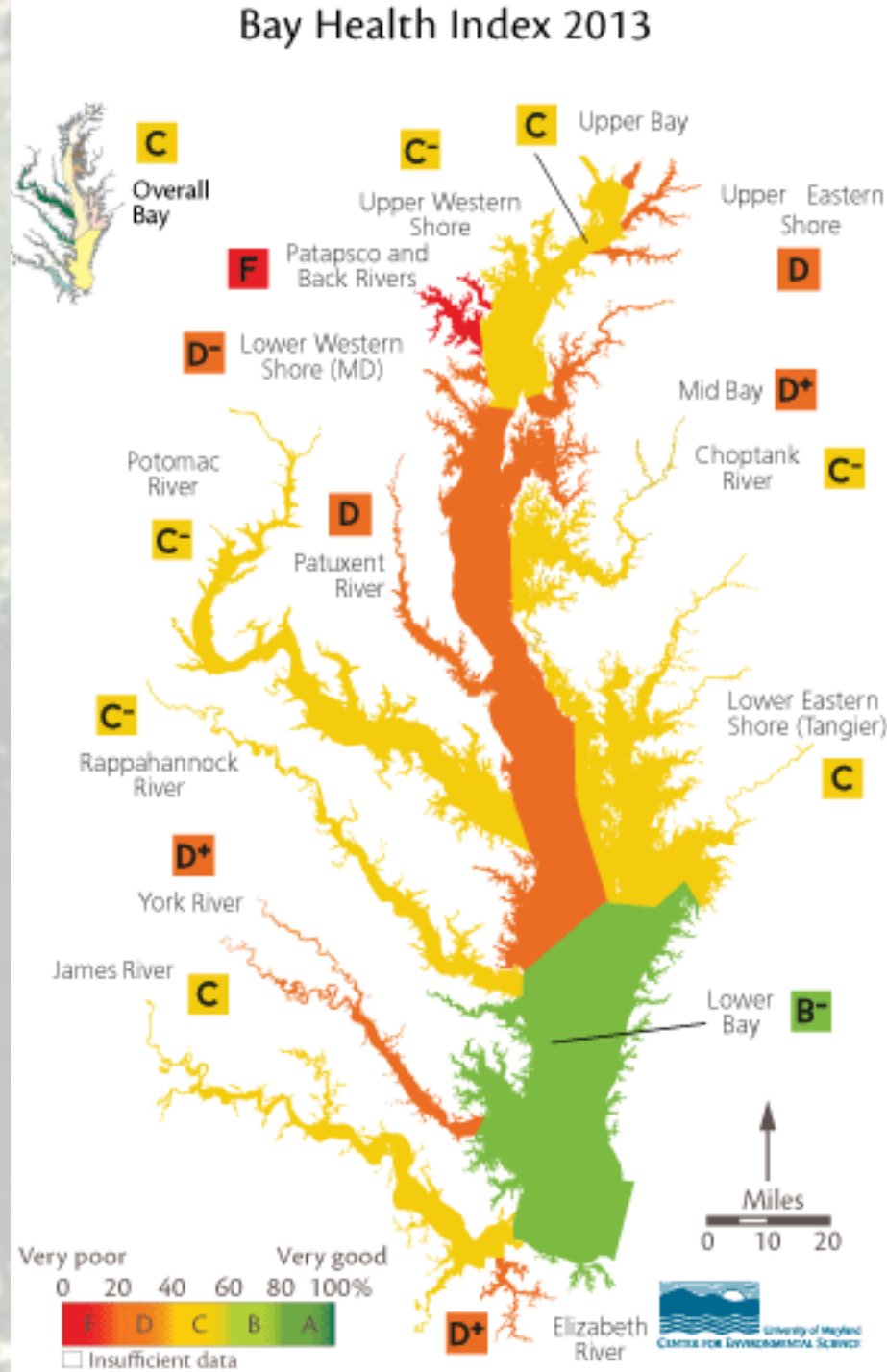
[video transcript](#)

BayStat in the News

5/6/10 - Statement from Governor Martin O'Malley on Maryland's Number One Ranking for Implementing Clean Water Recovery Funding - Governor's Office

4/29/10 - EPA unveils Bay

Citizens regularly updated on the State of the Bay

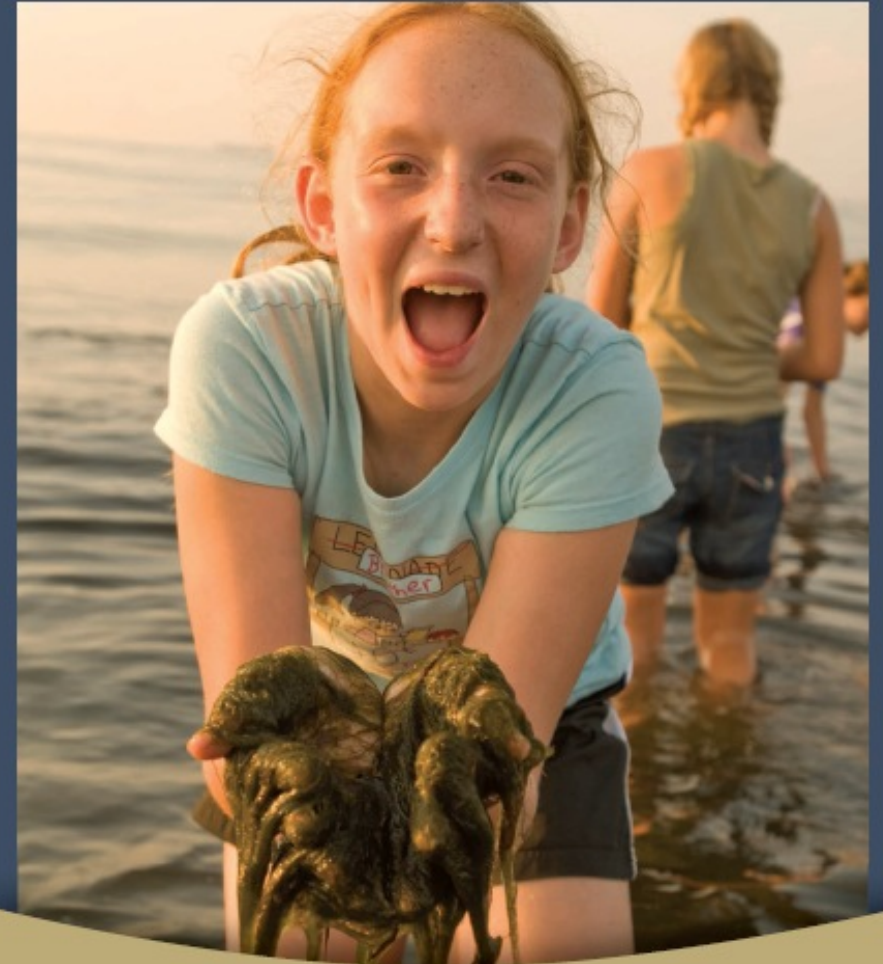


Environmental Educational Curriculum



chesapeakebay.net/groups/group/education_workgroup

Education of the next generation is the key to long-term success!



MID-ATLANTIC ELEMENTARY AND SECONDARY ENVIRONMENTAL LITERACY STRATEGY

Executive Summary

Elements of a Successful Bay Restoration

Good Governance

- 1) Top Level Political leaders' commitment
 - Federal, State and local governments involved and committed
- 2) Aggressive Science-Based Goal Setting
- 3) Measurable Commitments and Deadlines
- 4) Monitoring, reporting and adaptive management

Elements of a Successful Bay Restoration

Social Inclusion

- 1) Good Science: The linkage between governments', businesses' and citizens' actions and the health of the Bay must be clearly understood by all
- 2) Environmental education: K-12, Community Colleges, Universities, Continuing Education, Public Meetings
- 3) Fair and equitable restoration plan
- 4) Everyone understands, contributes (pays their share) and is accountable for their actions