Guiding the Restoration of the Chesapeake Bay:

The EPA Chesapeake Bay Program Partnership

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U.S. Embassy Paris

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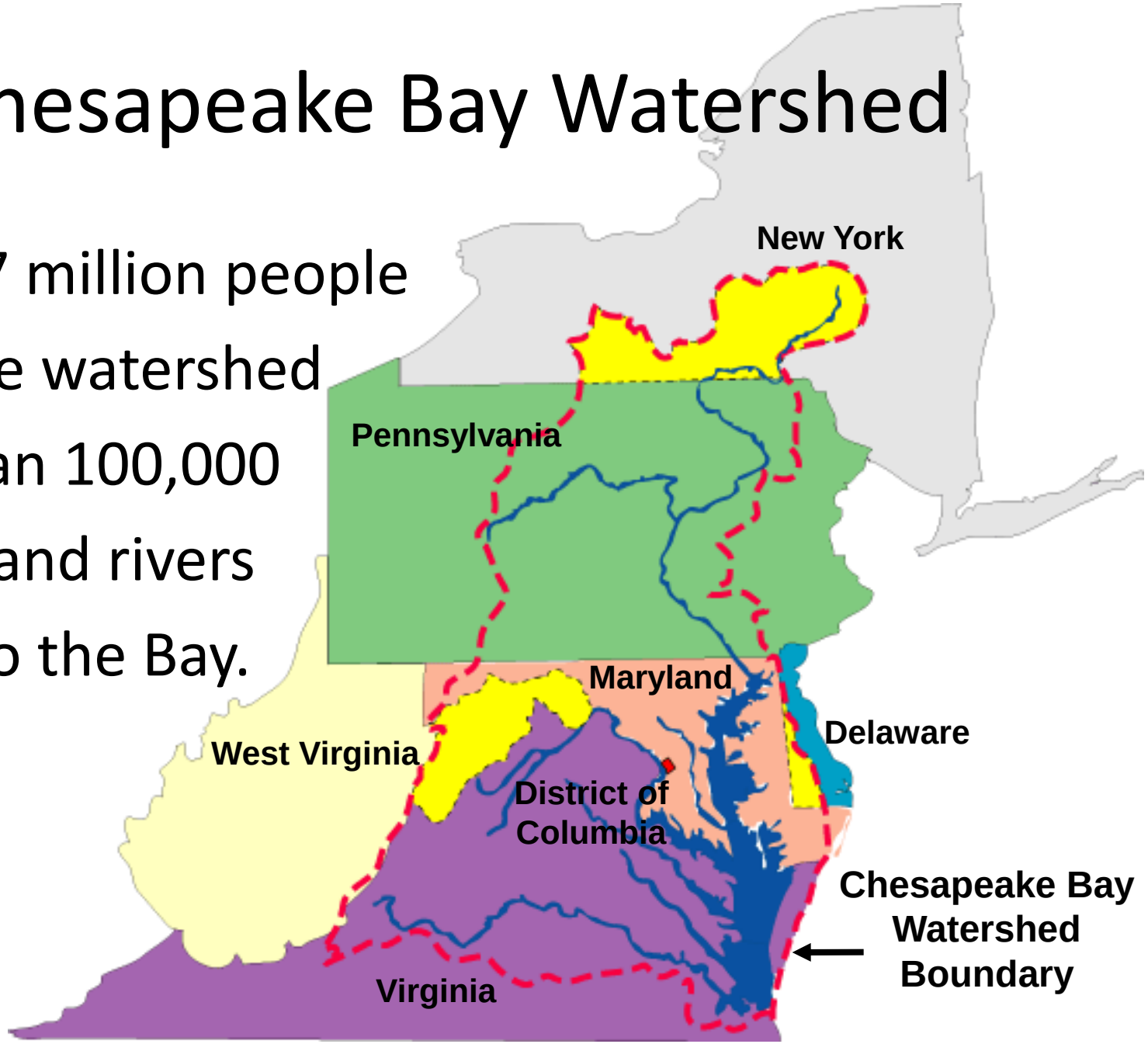
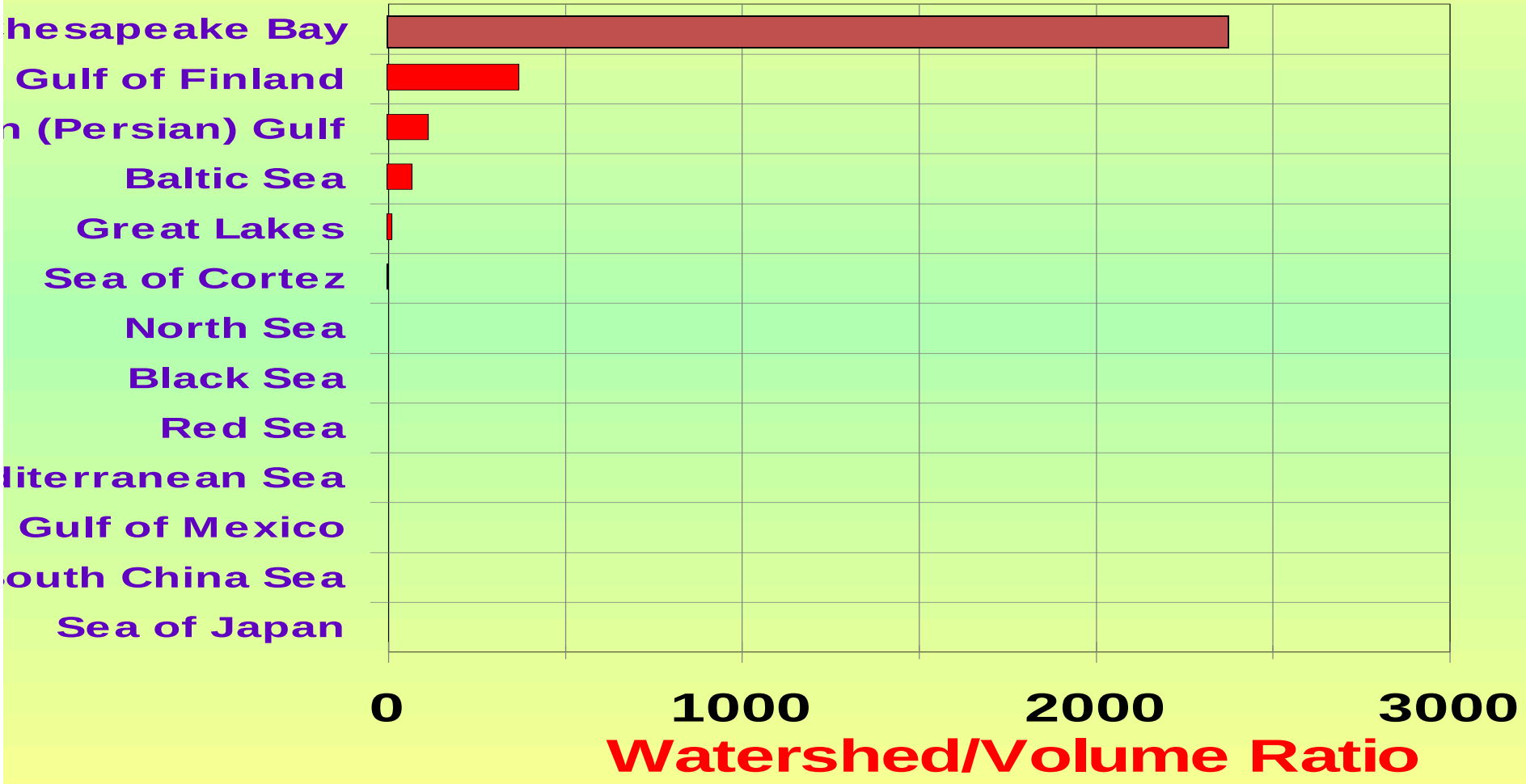
Chesapeake Bay Program
A Watershed Partnership

Chesapeake Bay Watershed

About 17 million people live in the watershed
More than 100,000 streams and rivers drain into the Bay.



Relative Watershed Sizes
(metric units)

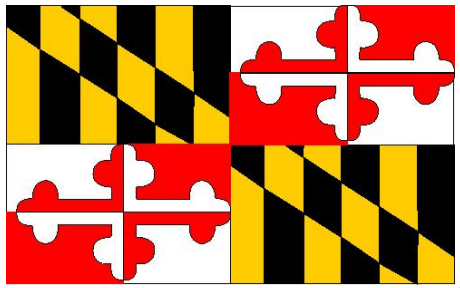


The Bay is relatively shallow: average depth of 7 meters;
20% is less than 2 meters in depth.

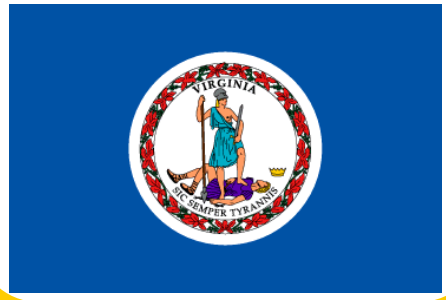
In 1983, the historic Chesapeake Bay Agreement established the Chesapeake Bay Program:

A unique federal-state-local partnership committed to restoring the Chesapeake Bay.

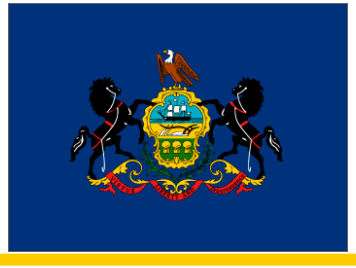
Governor of MD



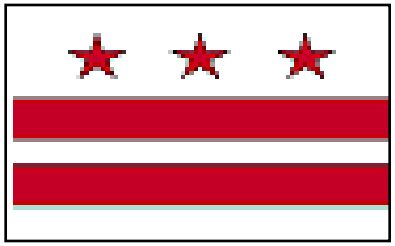
Governor of VA



Governor of PA



Mayor of DC



EPA Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Executive Council

Chesapeake Bay Program
A Watershed Partnership

Chair of Chesapeake Bay Commission

“Headwater” states of Delaware, New York, and West Virginia joined in ‘02

Delaware

New York

West Virginia

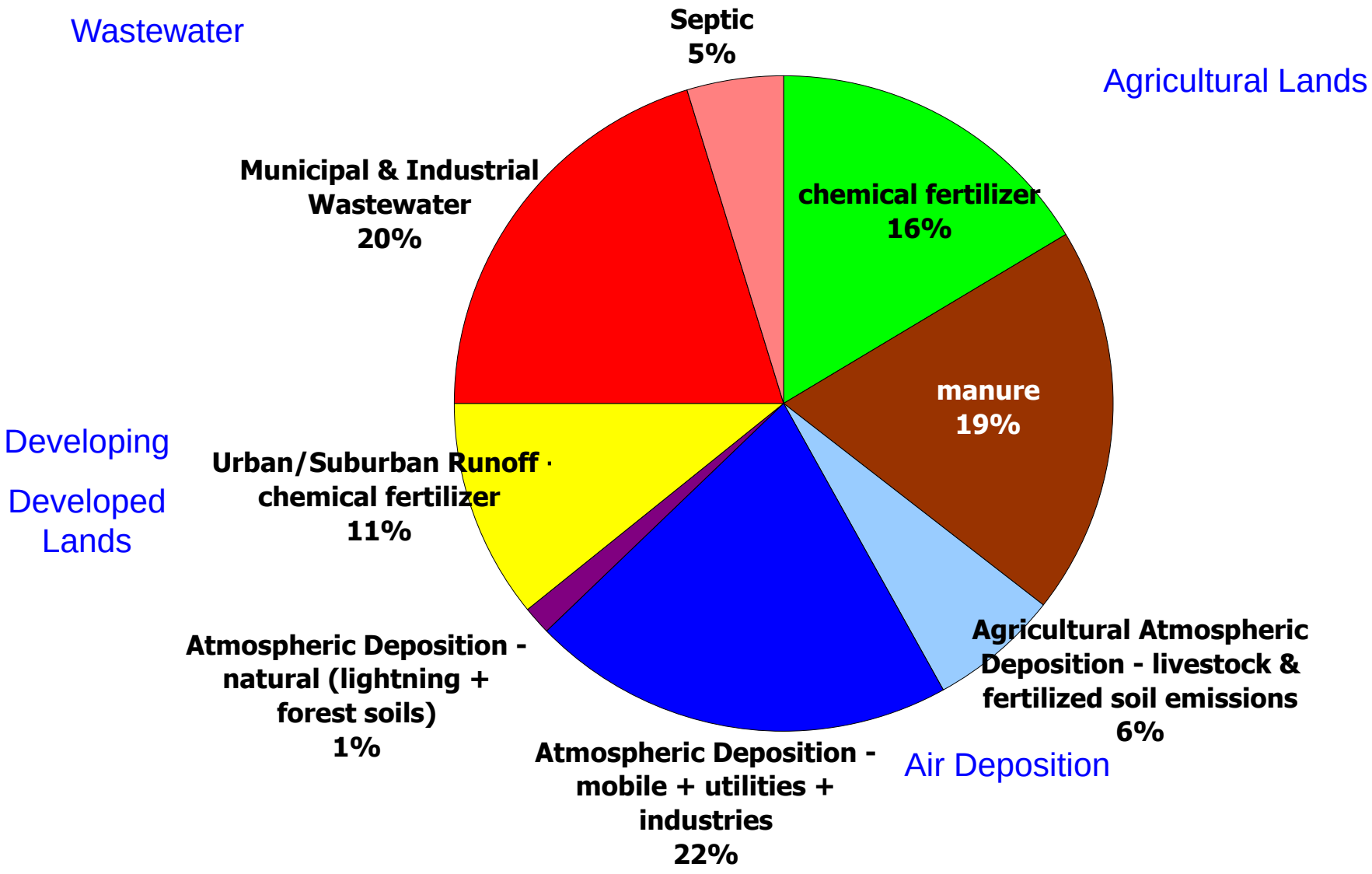
Key Chesapeake Bay Program Partners

Federal Partners

Academic Partners

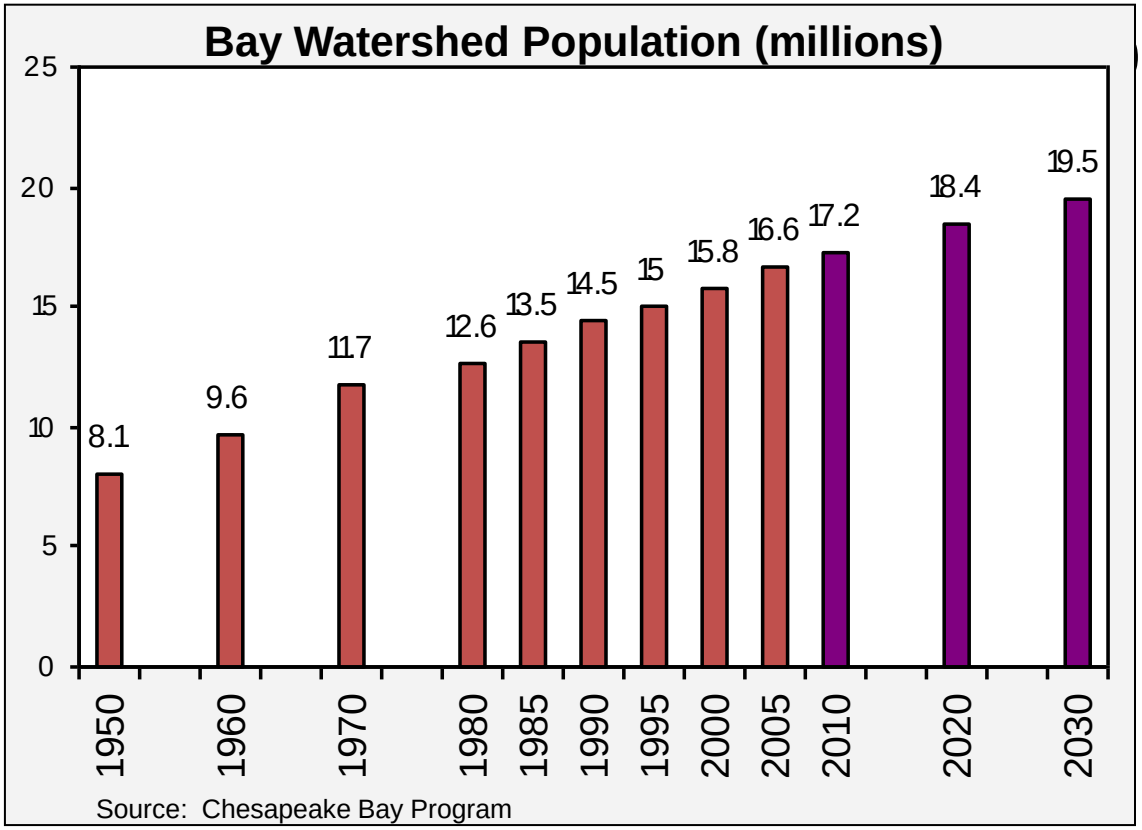
NGO and Watershed Organization Partners

We Know What the Sources Are…

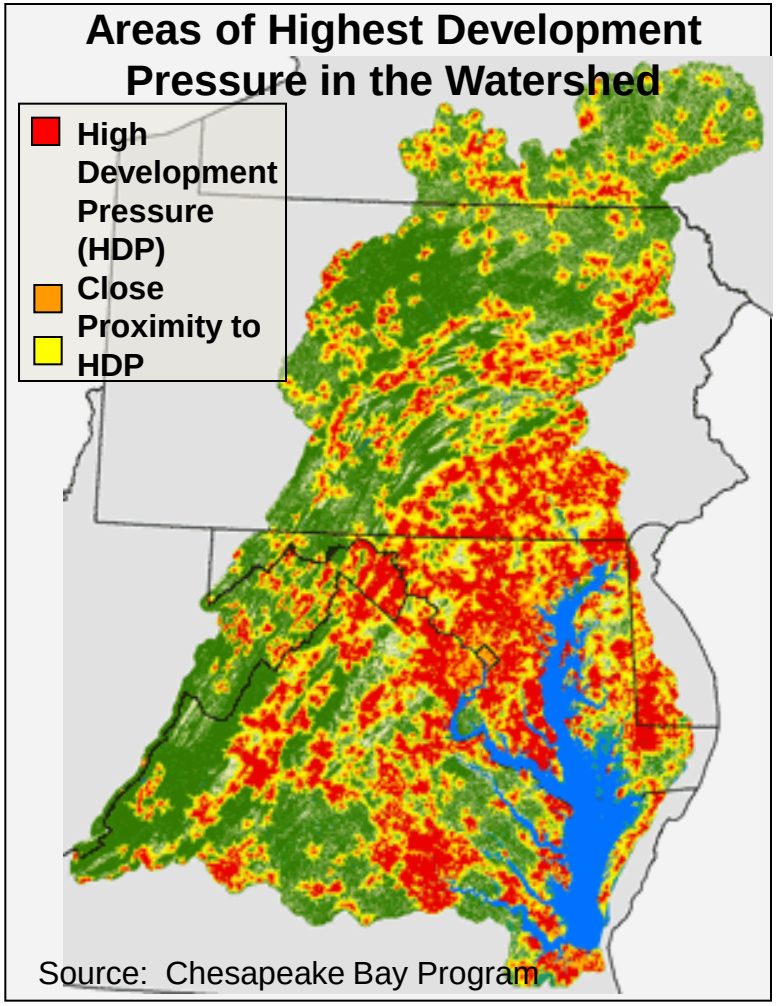


Agriculture in Bay watershed is the greatest pollution source: 70% of the sed. load 62%, 41% of the N, and 45% of the P

The Bay Watershed is undergoing rapid



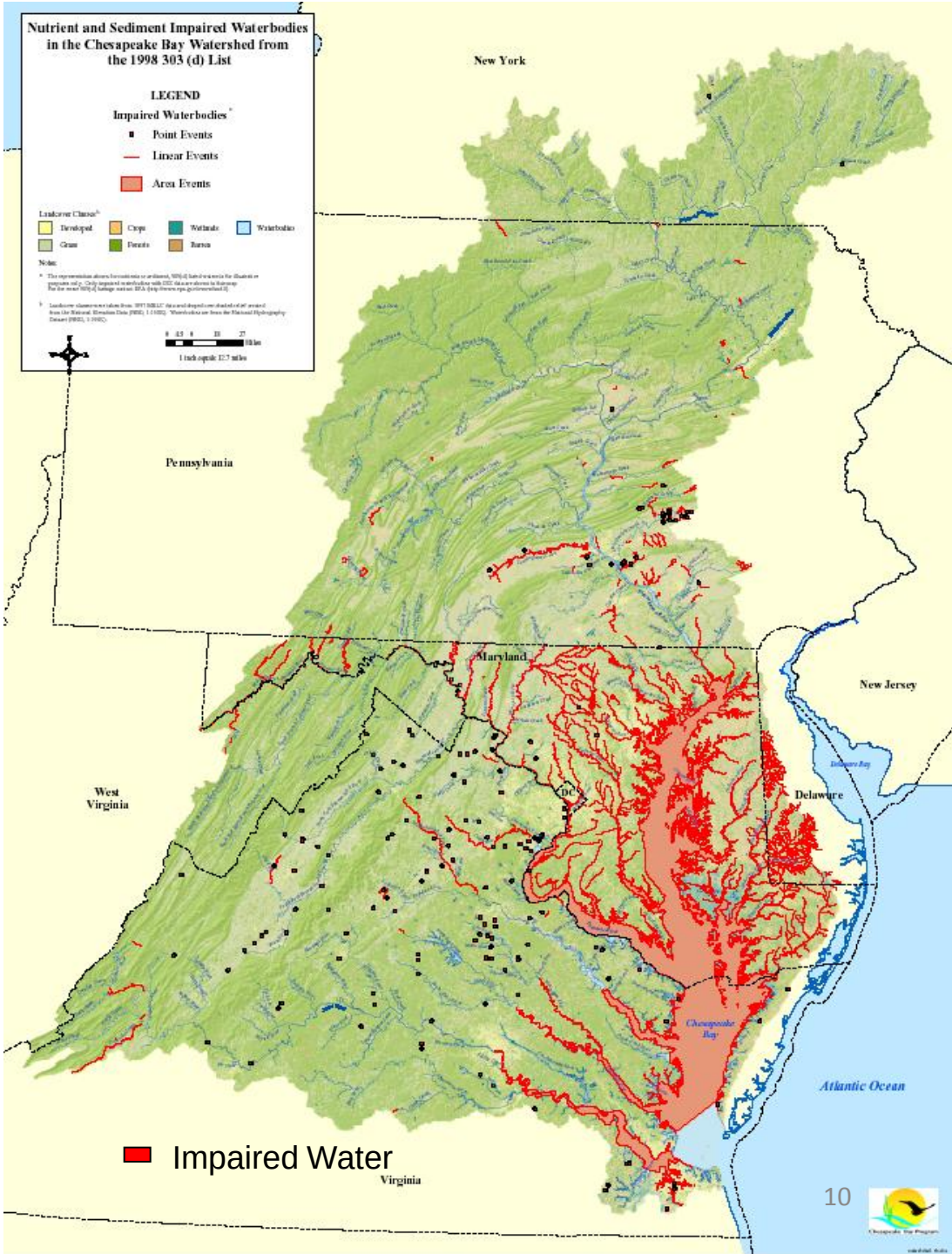
Every year the population increases by 170,000 people.



Every day we lose 100 acres of forests.

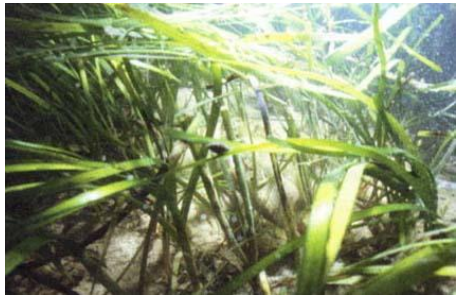
Over 90% of the Bay and its tidal rivers are impaired due to low dissolved oxygen levels and poor water clarity, all related to nutrient and sediment pollution.

Without oxygen and grasses, the Bay's crabs, oysters, and fish cannot survive and thrive.



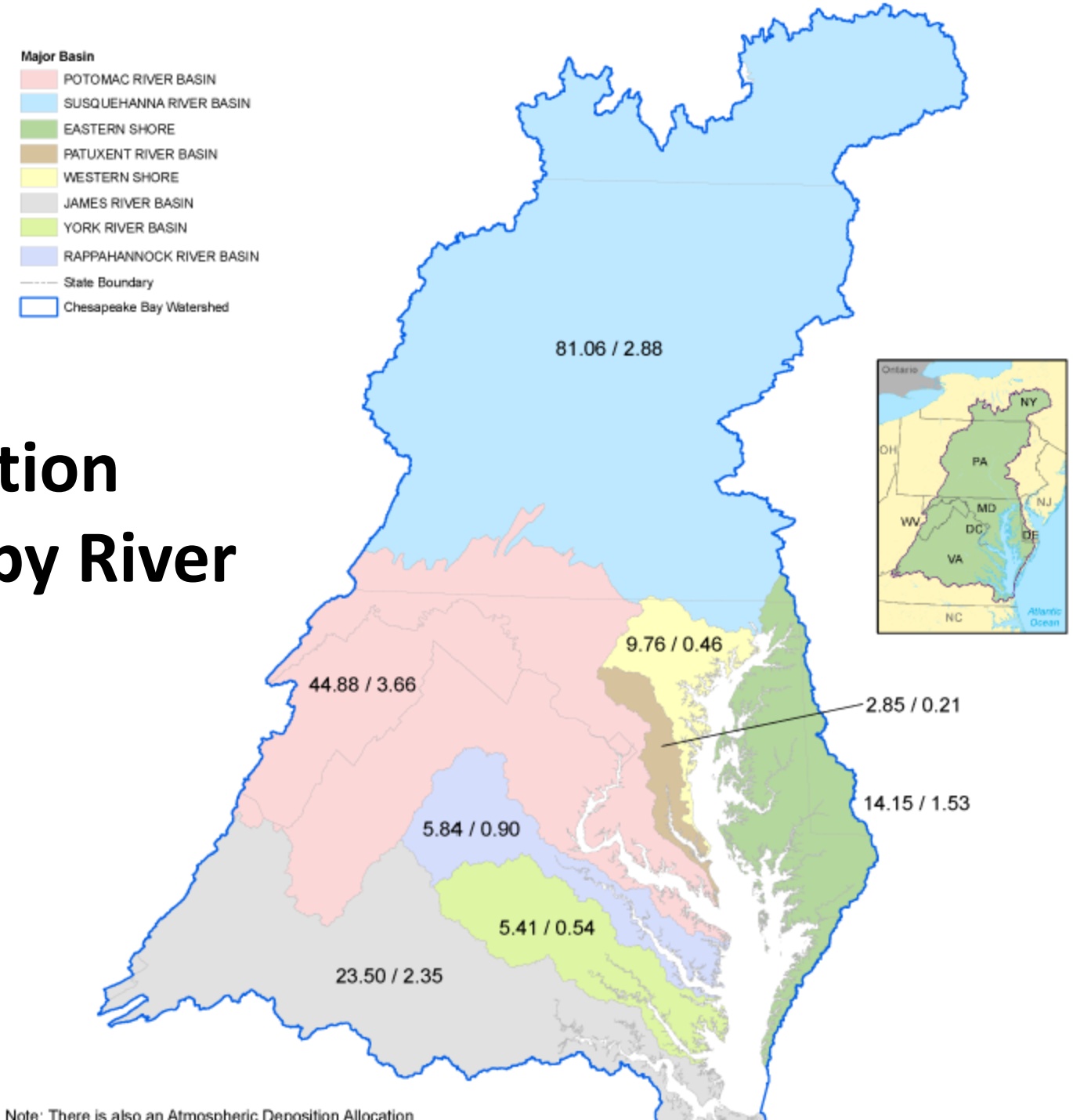
Restoration Efforts:
Water Quality in a Restored Bay

- 28 years of voluntary efforts (1983-2010) - many successes, but tremendous population growth off-set progress
- 2010 regulatory regime with TMDL – Total Maximum Daily Load – largest in the US. TMDL = Pollution Diet
- Limit 185.9 m lbs N (-25%); 12.5 m lbs P (-24%) and 6.45 b lbs sed (-20%)



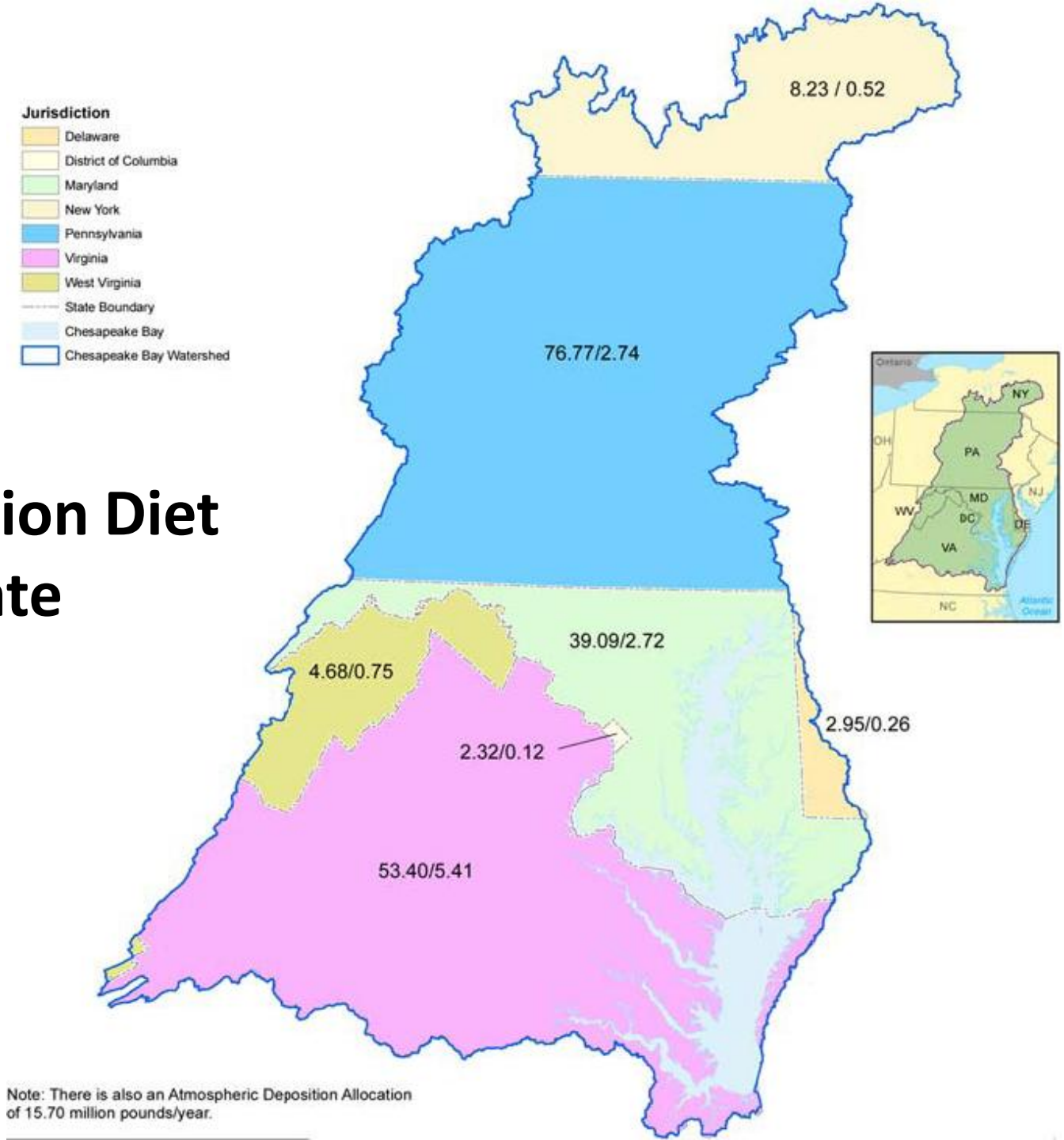
EPA has published dissolved oxygen, water clarity and chlorophyll *a* criteria which define the conditions necessary to protect the wide variety of the Bay's living resources and their habitats.

Pollution Diet by River



Note: There is also an Atmospheric Deposition Allocation

Pollution Diet by State



Note: There is also an Atmospheric Deposition Allocation of 15.70 million pounds/year.

Successes and Challenges

Chesapeake Bay Program: Our Lessons Learned

- Broad Partnerships Are Essential
- Shared Responsibility Results in Broad Leadership
- Sound Science Must Be a Bedrock Principle
- Numeric Goals with Real Deadlines Are Necessary
- Transparency to the Public, Press and Politicians Is Vital to Credibility, Support and Engagement
- Communicate progress
- Need regulatory program for agriculture and development