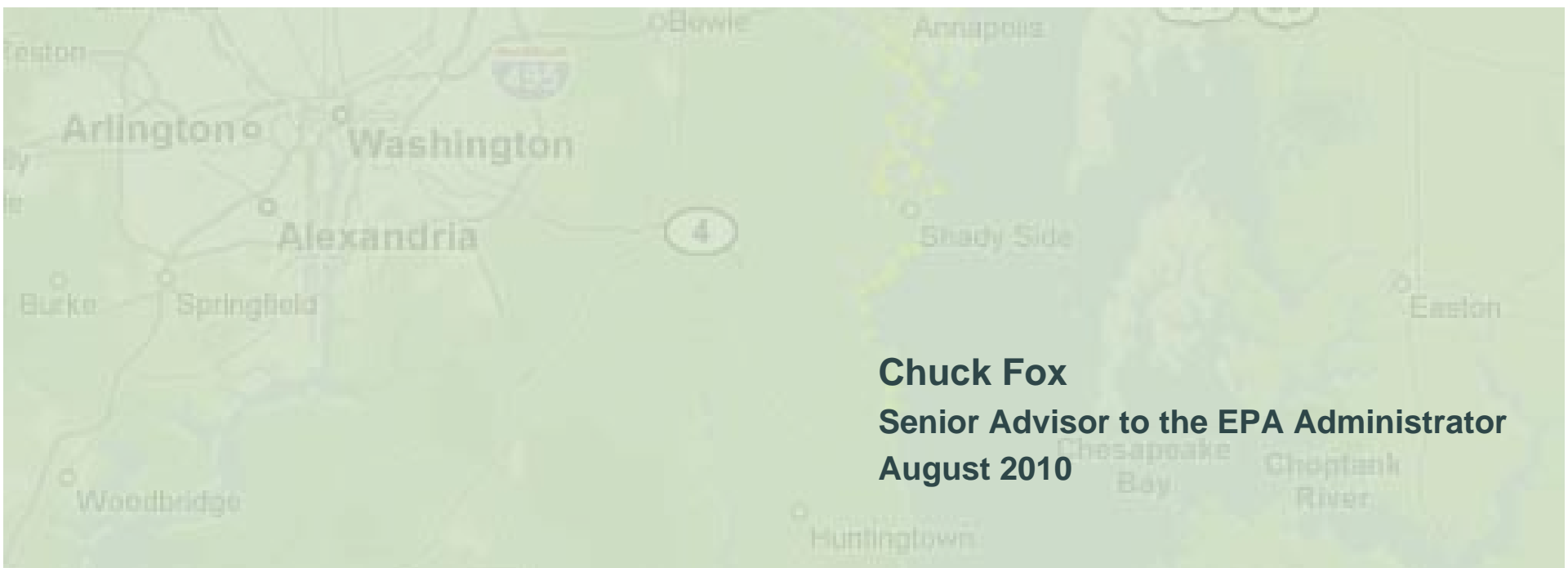


Protecting and Restoring the Chesapeake Bay Watershed



Chuck Fox
Senior Advisor to the EPA Administrator
August 2010

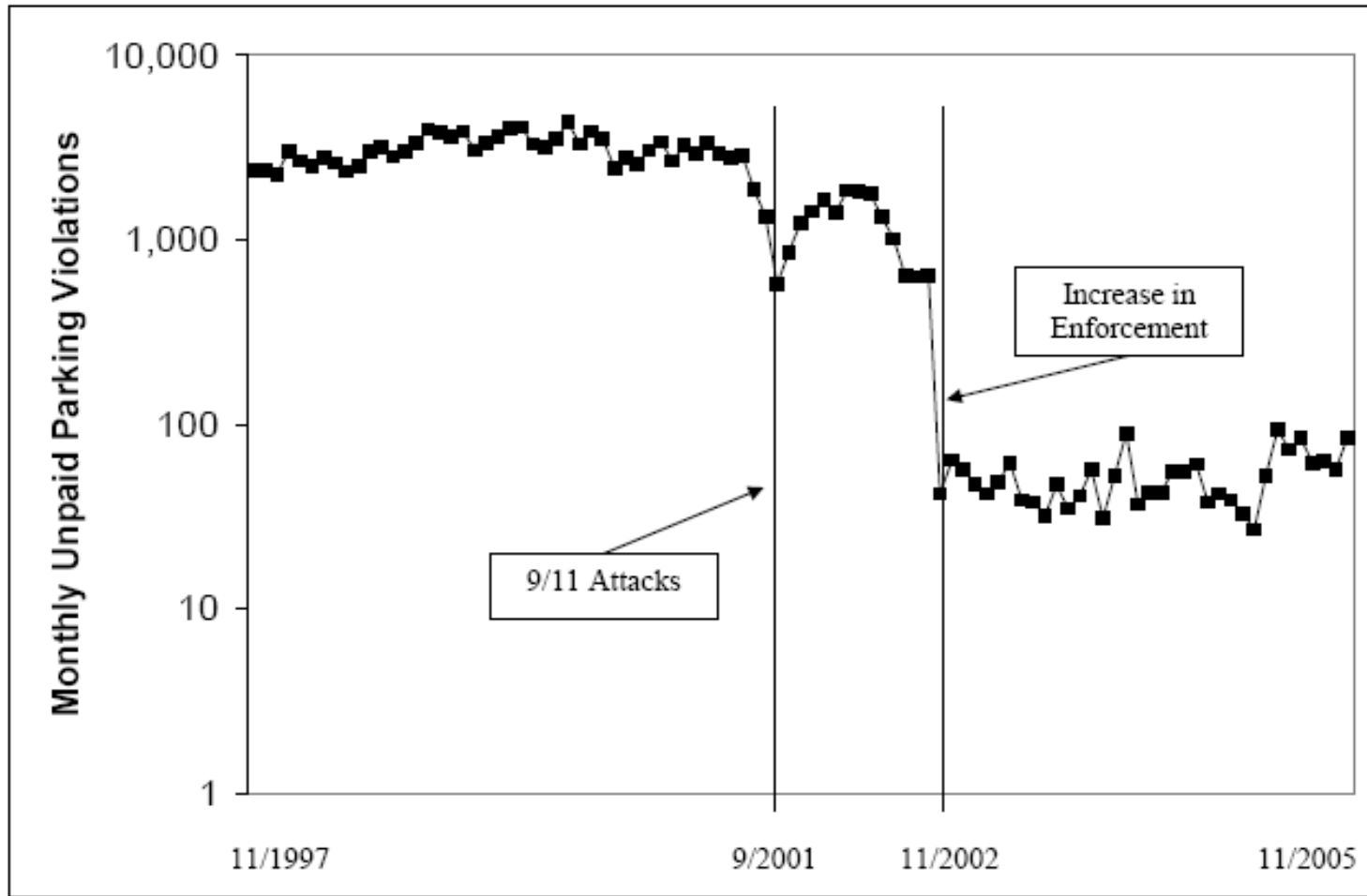


Atlantic Ocean

- 64,000 square mile watershed
- Home to 17 million people
~ 150,000 new people each year
- ~ 77,000 farms
- Land-to-water ratio is 14:1



Figure 1: Total Monthly New York City Parking Violations by Diplomats, 1997-2005 (log scale)





Gross Domestic Product



Vehicle Miles Traveled



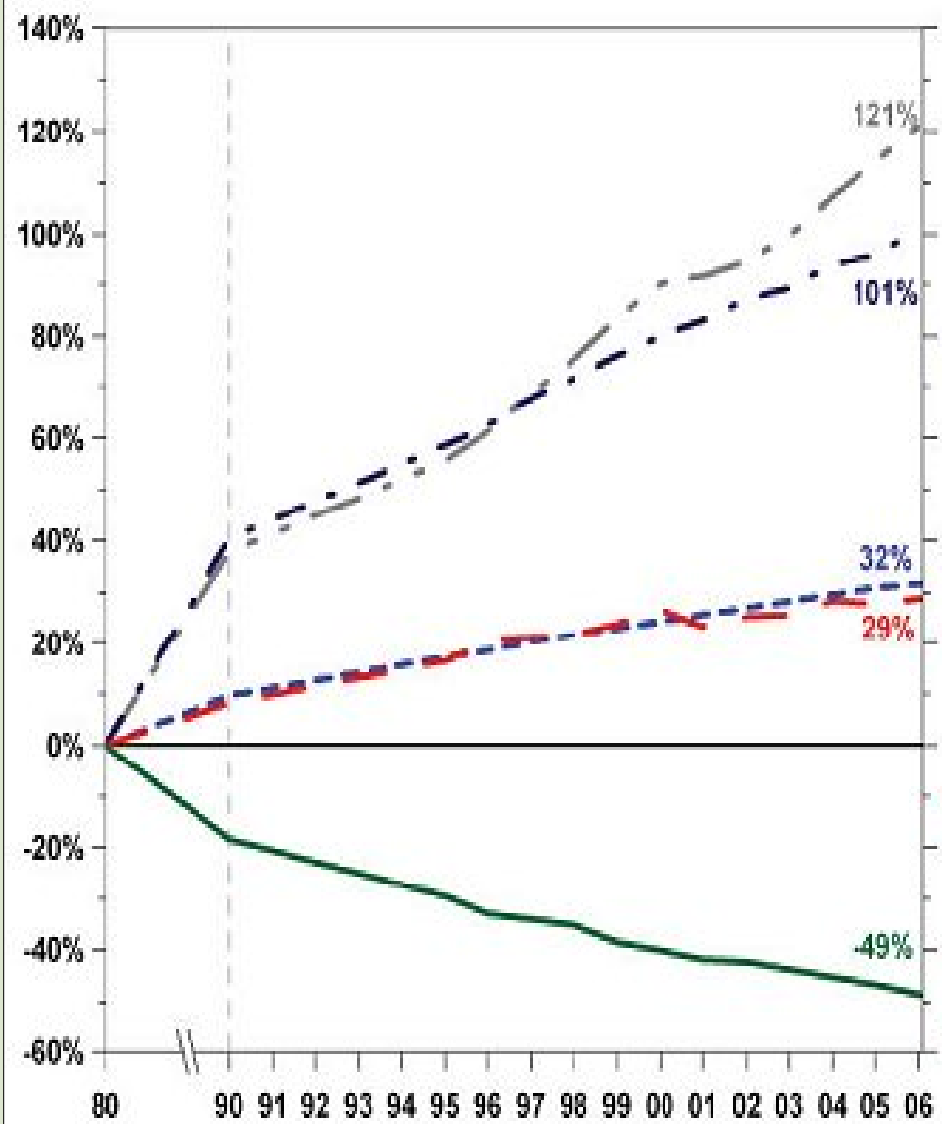
Population



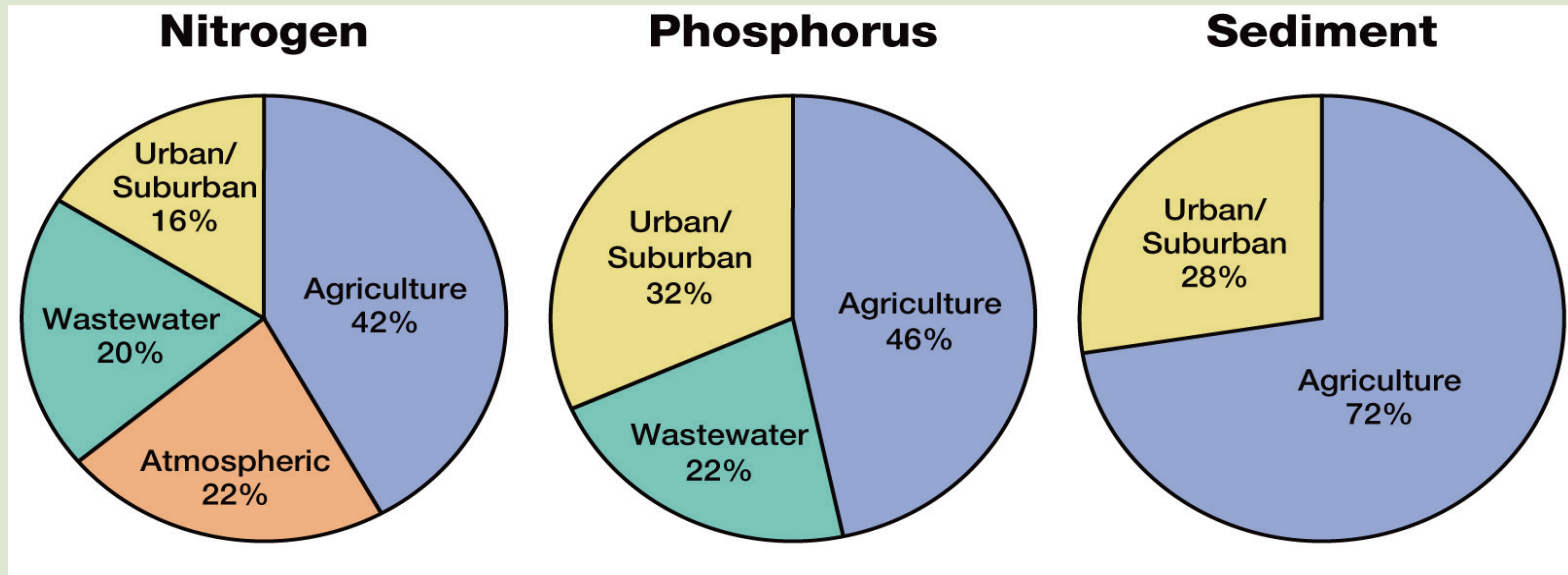
Energy Consumption



Aggregate Emissions
(Six Principal Pollutants)



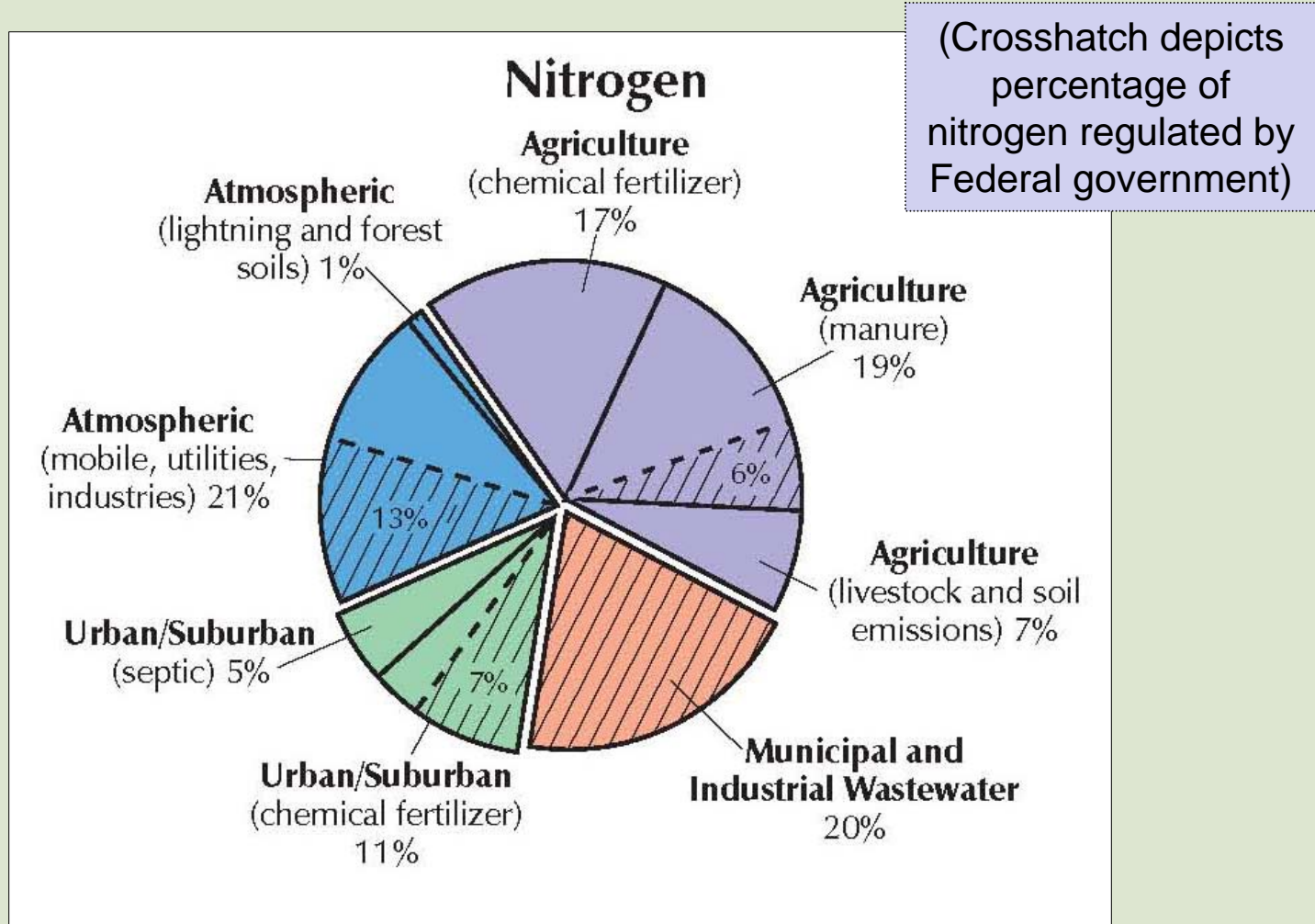
Sources of Nutrients and Sediments



Nutrient and sediment sources. Wastewater loads based on measured discharges; the rest are based on an average-hydrology year. Does not include loads from direct deposition tidal waters, tidal shoreline erosion or the ocean.

Data and Methods: www.chesapeakebay.net/stats_reducingpollution.aspx

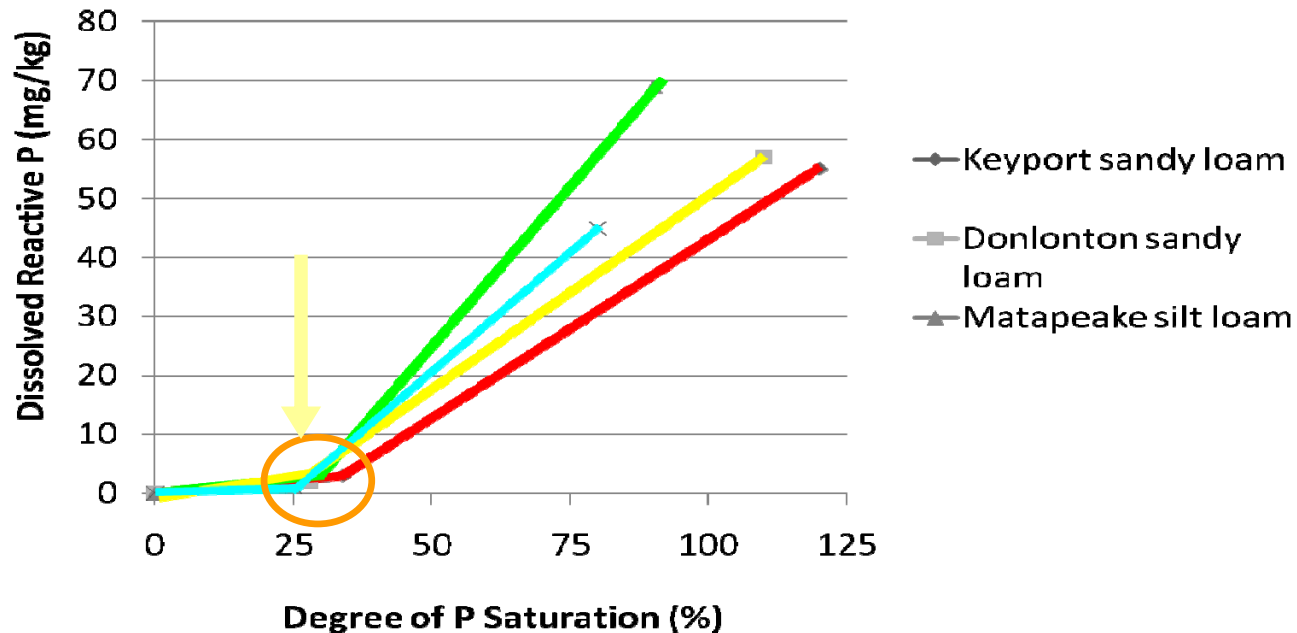
What % of the Total Load is Federally Regulated?



P Can move to Bay when soils are 20% Saturated with P or greater

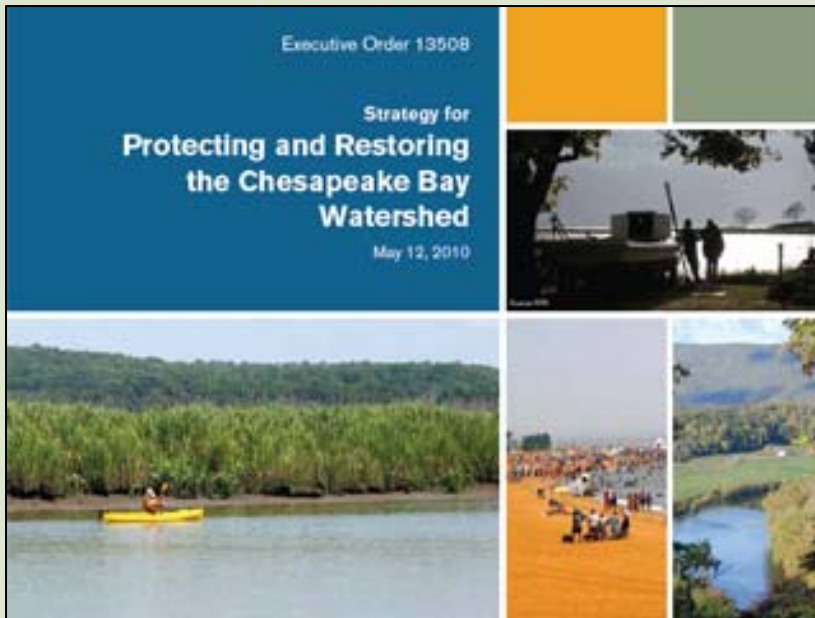
Independent Reports – Water Stewardship, Inc.

P Saturation & Dissolved P Release to Water



Exponential increase in P released when P-Sat ~ 20 and 30%
(Butler & Coale, 2005)

EO Strategy Outline



EO Strategy Outcomes

Key Goal: Restore Clean Water

Reduce nitrogen, phosphorus, sediment and other pollutants to meet Bay water quality goals for dissolved oxygen, clarity, chlorophyll-a and toxic contaminants.

To achieve this goal, EPA will:

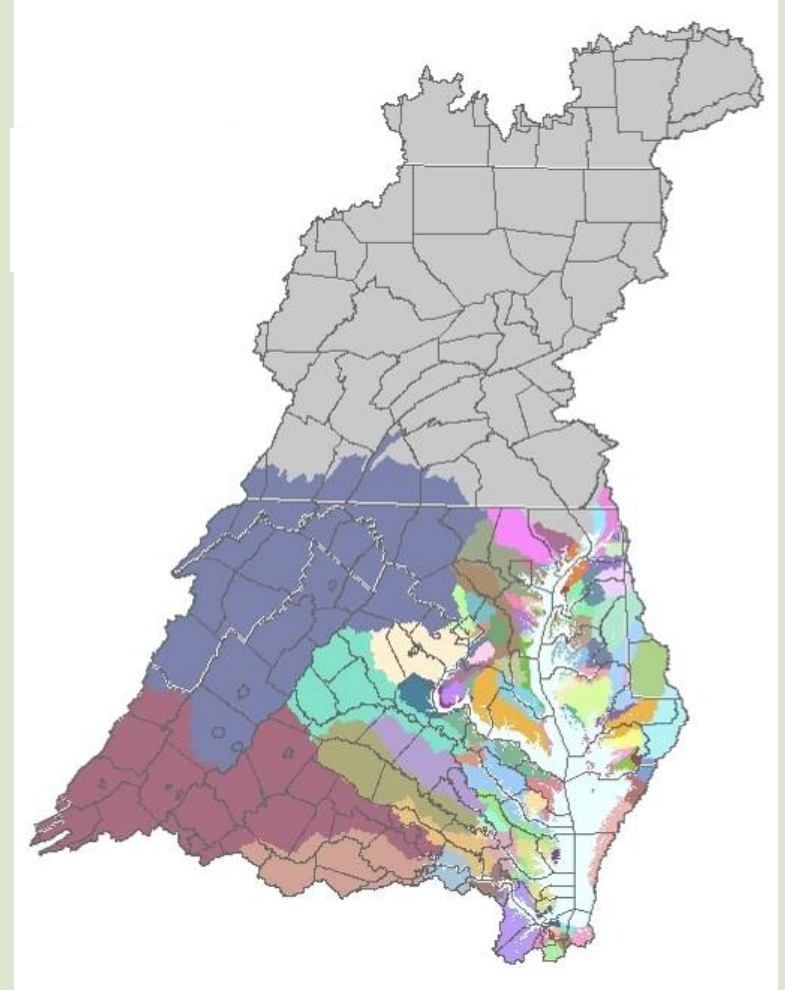
- Establish and implement the Chesapeake TMDL.
- Strengthen regulations for stormwater and concentrated animal feeding operations (CAFOs).
- Explore opportunities to further support the use of trading among pollution sources to achieve water quality goals cost effectively.
- Strengthen enforcement and compliance activities.
- Increase grant funding for state regulatory programs to support TMDL implementation.



Bay TMDL

A New Accountability Framework

- **TMDL:** Set “pollution diet” or limits for sources of nitrogen, phosphorus and sediment to the Bay to meet water quality standards (up to 92 impaired segments)
- **Watershed Implementation Plans (WIPs):** States/DC describe what amount, how, where, and when.
- **2-Year Milestones:** States and DC, working with local partners, implement actions to reduce loads
- **Consequences:** EPA evaluates plans and milestones and adopts as necessary
- **Offsets/Trading:** Support “net improvement offsets” to account for new or increased sources and trading to encourage partnerships.



QUESTIONS



<http://www.chesapeakebay.net/>

<http://executiveorder.chesapeakebay.net/>