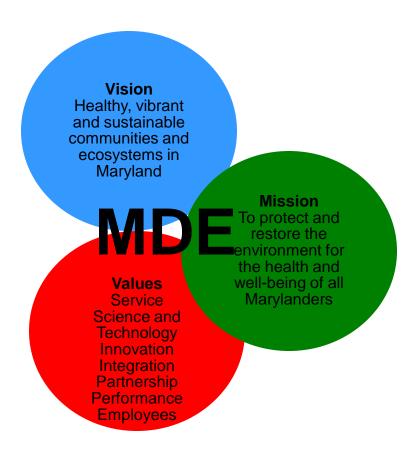




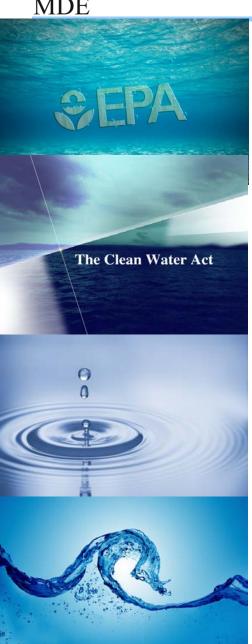
Overview of Today's Meeting

- Welcome/Background/Purpose
- State of the CWA Section 303(d)
 Program in Maryland
- EPA's New National Approach ("New Vision")
- Maryland's Prioritization for TMDL Development, 2016-2022
- Protecting High Quality Waters in Maryland
- Q&A/Discussion









Clean Water Act Section 303(d) Program

What it is:

- Assessment and identification of impaired waters (Integrated Report)
- Development of TMDLs: setting restoration goals, pollution diets

What it is not:

- Development and adoption of water quality standards
- Implementation of pollution control activities



Maryland's TMDL Program





History

- 1998 2011: Original Memorandum of Understanding (MOU)
 - Requirements largely satisfied
 - TMDLs or WQAs developed for numerous types of impairments
 - Chesapeake Bay TMDL for nutrient and sediment
 - Public water supply reservoirs
 - Many other local TMDLs

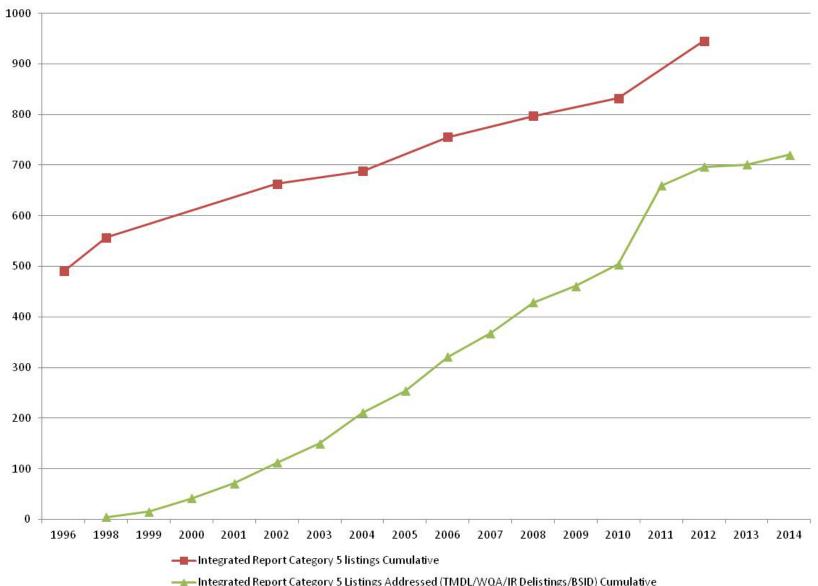
Continuous Commitment

- 2013: New MOU
- 2014: EPA's Post Consent Decree and MOUs National Approach
- EPA's New Vision





Maryland's CWA 303(d) Program





The Key to Success!

Partnerships in TMDL Development

- Maryland Department of the Environment
- USEPA Chesapeake Bay Program
- Maryland Department of Natural Resources
- USGS
- Interstate Commission on the Potomac River Basin
- Maryland Geological Society
- Army Corps of Engineers
- Local Governments
- Academic Institutions
- Non-profits/NGOs/Environmental Groups































WQ Monitoring in Maryland



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DEPARTMENT OF

ATURAL RESOURCES

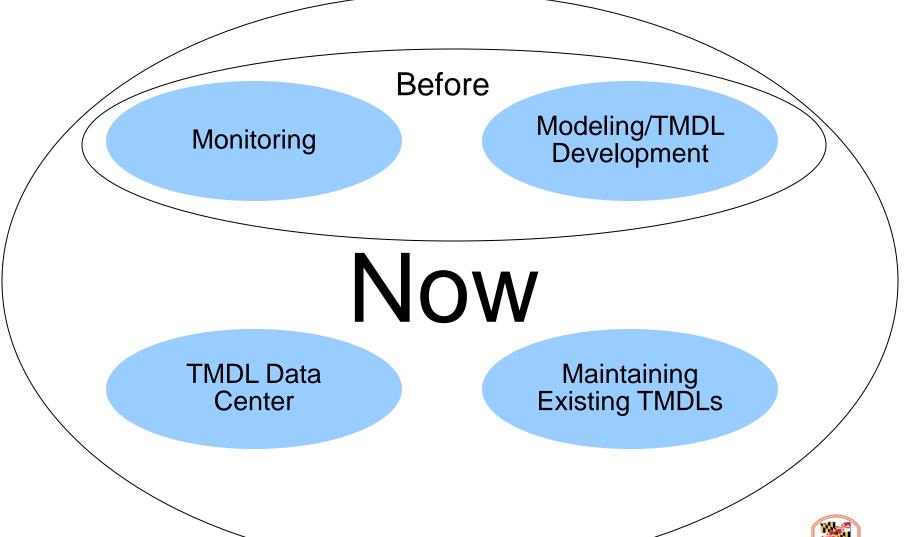
- Robust Monitoring Program
- Partnership with:
 - MDE
 - DNR
 - Chesapeake Bay Partnership
 - Other sources of data meeting rigorous standards (QAPP)



- Assessment
- > TMDL Development
- > Trends



Maryland CWA 303(d) Program Now





EPA National Approach for CWA § 303(d) Program

 National approach (EPA's "New Vision") seeks to establish future pace for addressing impaired waters and facilitate more quantifiable improvement in water quality

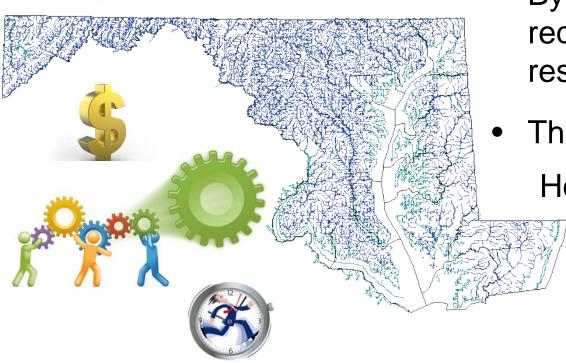
Elements or Goals

- > 2014: Engagement
- > 2016: Prioritization
- > 2016: Protection
- 2016: Integration
- > 2018: Alternatives
- 2020: Assessment





TMDL Prioritization - Purpose



We want to do this efficiently and effectively

- By federal law, States are required to protect and restore their waters
- That's MDE's Mission How is this done? by:
 - 1. Monitoring and assessment
 - **Determining what's** impaired
 - **Developing TMDLs** (setting pollution limits)
 - Implementing these **TMDLs**





MDE

- Pollutants of Concern
 - Nutrients (Nitrogen and Phosphorus)
 - Sediment
- Chesapeake Bay TMDL developed in 2010
- Improving the Bay Models for the Mid-Point Assessment

MDE

Restoration of Local Waterways



Bioaccumulation

T I M E

PCB levels

PCB levels

Biomagnification

- Working Towards Healthy Aquatic Ecosystems and Communities
- Other pollutants of concern:
 - Bacteria
 - Shellfish harvesting areas
 - Beaches
 - Toxic Substances: Mercury and PCBs
 - > Chlorides
- Priority Watersheds: Throughout the State



What will not be completed between 2016 and 2022



2014 IR impairments that will not be fully addressed by 2022

- Sulfates
- Nutrients (non-tidal)
- pH
- Temperature
- Tidal Biological





Looking Forward

- Will we have more impairments?
 - New data and New IR every 2 years

- How about emergent contaminants?
 - (e.g. pharmaceuticals and personal care products)





Maryland Department of the Environment

TMDL Technical Development Program

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