Big TMDL, Small WBPs:
Implementing the Chesapeake Bay TMDL with 319 funds?

Maryland
Department of
the Environment

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Water Quality Standards & Analysis	Water Quality Modeling **TMDL Development**	Watershed Restoration Planning **319, Chesapeake Bay Restoration**	Water Resources Planning Support

Maryland "Local" TMDLs and WBPs

WBP

=

TMDL

Chesapeake Bay TMDL Background

- Chesapeake Bay low DO, clarity

- Chesapeake Bay watershed = **64,000 mi^2**

- MD, PA, NY, DE, WV, VA, DC

- TMDL established by EPA in 2010

- TMDL for nitrogen, phosphorus, sediment

- Each jurisdiction assigned target loads

Not Just a TMDL

Shore Rivers

- Chesapeake Bay Program Partnership

- 2014 Watershed Agreement

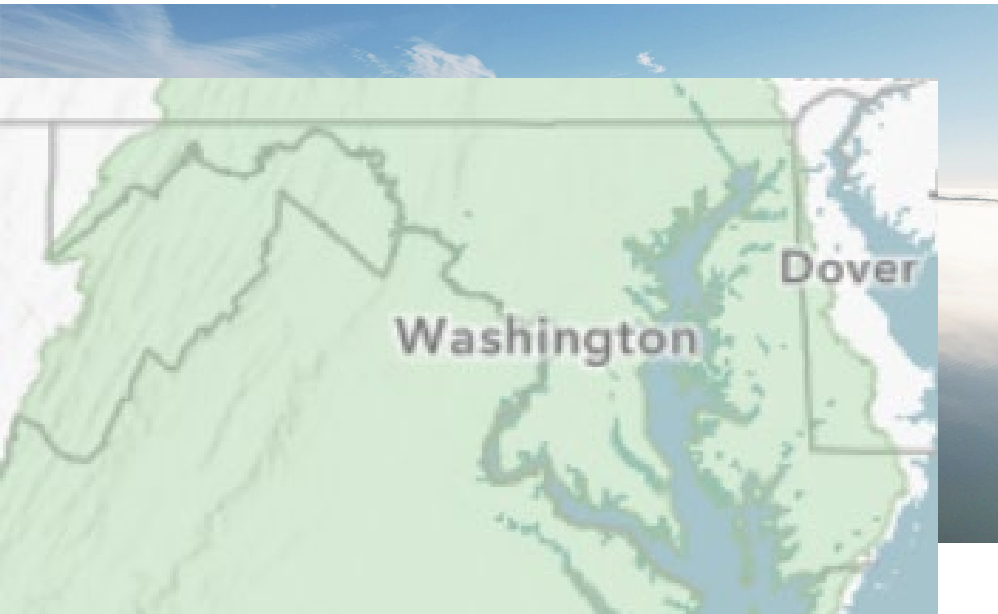- Each jurisdiction's Watershed Implementation Plan (WIP)

Watershed Implementation Plans

- Detailed, specific steps each Bay watershed jurisdiction will take to meet pollution reduction goals of Bay TMDL

    - Point and nonpoint sources

- Two-year milestones

- Annual progress determinations

- MD has Addendum accounting for climate change

Is MD's WIP a WBP?

✓ Designed to achieve NPS pollutant load reductions necessary to meet loadings set by TMDL

✓ Describes causes/sources, PS/NPS management measures necessary to achieve MD's portion of Bay TMDL, other WBP elements
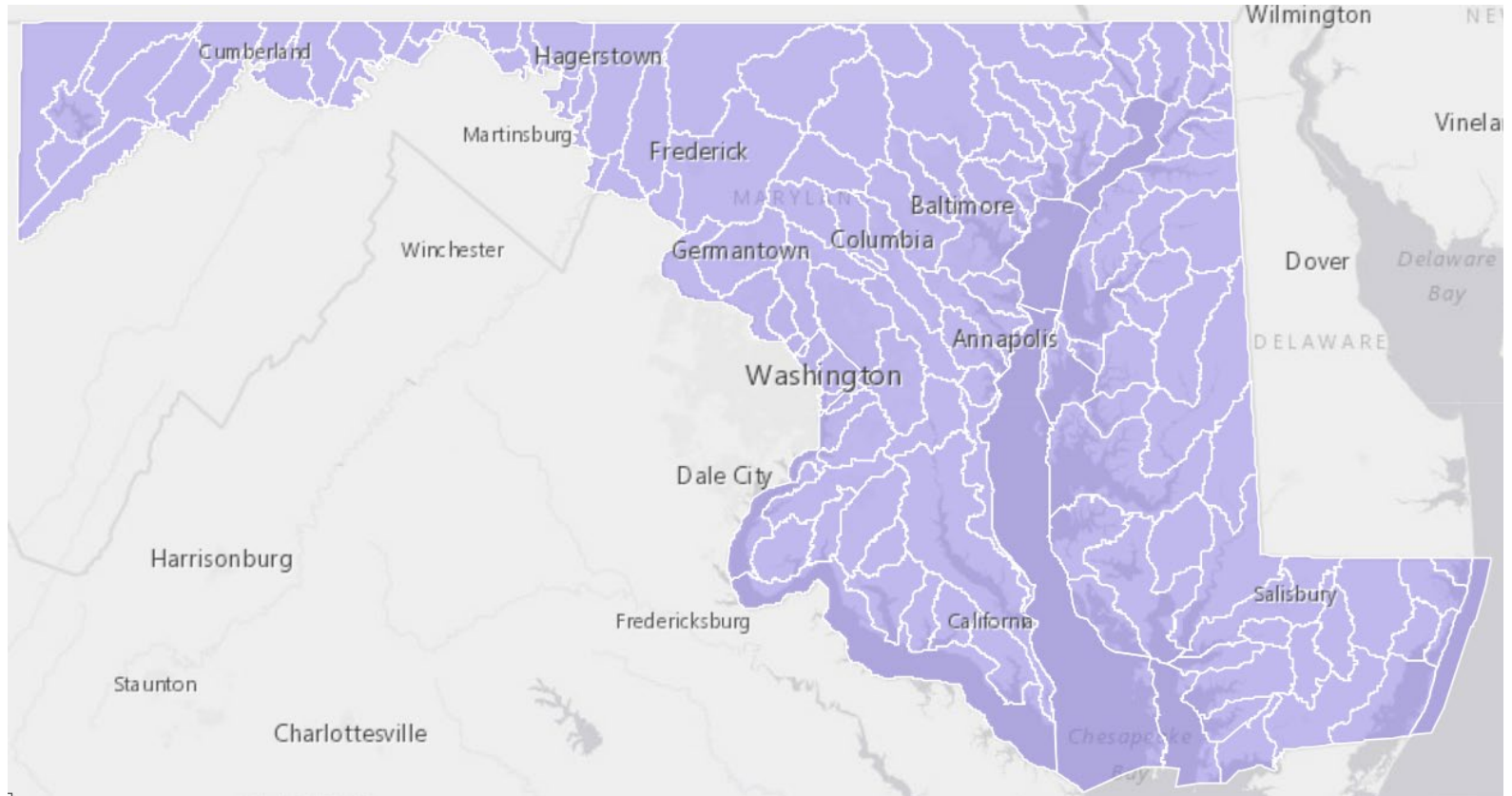
✗ ~ 14,000 mi^2 watershed

"Handbook for Developing Watershed Plans"

- "Where **existing plans and strategies** have been developed at a basin-wide or other **large geographic scale**, they usually **need to be refined** at the smaller watershed scale to provide the information needed to develop a watershed plan."

- "If your plan addresses a small drainage system **within a watershed** covered by a separate plan, make sure your planned activities are **integrated with those broader-scale efforts**."

- *"How to bridge the various scales is an ongoing issue in watershed planning."*
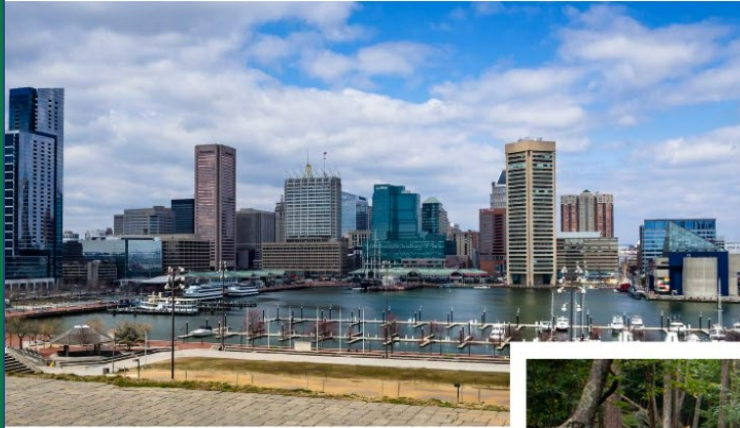
MD Subwatersheds

WBPs for Bay Subwatersheds

To implement MD's allocations in **Bay TMDL**

- Not "local" TMDLs

- Existing model*

- Local WIP input

- MD WIP = locally driven, achievable, balanced

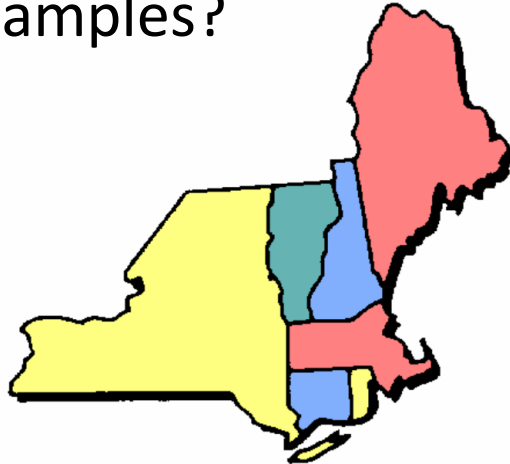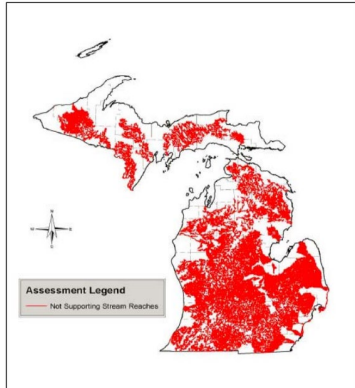# Chesapeake Assessment Scenario Tool (CAST)

- CBP's watershed model
- Estimate N, P, sediment loads
- User-specified area
- User-specified practices
- Scenario costs provided

Large Watersheds and/or TMDLs

- Gulf hypoxia?

- Regional TMDLs?

- Statewide TMDLs?

- Other examples?

Shore Rivers

Your Questions?
and Ideas*!!*

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