2022 WRE GUIDANCE UPDATE

Best Practices for Integrating Climate Change, Identifying Suitable Receiving Waters





WRE OVERVIEW

- The purpose of the WRE is to identify:
 - "drinking water and other water resources that will be adequate for the needs of existing and future development proposed in the land use element of the [local comprehensive] plan; and,
 - suitable receiving waters and land areas to meet stormwater management and wastewater treatment and disposal needs of existing and future development proposed in the land use element of the [local comprehensive] plan"





WHAT'S NEW? WHY?

- Provides checklists and best practices to:
 - Protect water resources as the local land use plan is developed and implemented consistent with Maryland Department of the Environment's (MDE) current water resources programs; and,
 - Integrate climate change considerations, particularly flooding risks, into WRE assessments.
- Web-based (https://planning.maryland.gov/Pages/OurWork/envr-planning/water-resources-mg/2022/2022-guidance-update.aspx)





What's Stayed the Same?

- •The Drinking Water Assessment and Wastewater Assessment guidelines of the 2007 WRE Model & Guidelines (M&G) are still current and should be followed.
 - https://planning.maryland.gov/Pages/OurWork/envr-planning/w ater-resources-mg/guidelines/guidelines-IV.aspx
 - https://planning.maryland.gov/Pages/OurWork/envr-planning/w ater-resources-mg/guidelines/guidelines-V-a.aspx





GENERAL MDE AND MDP EXPECTATIONS

- That local governments follow WRE checklists and best practices as much as possible, including:
 - Completing necessary data compilation and analyses before a comprehensive plan update begins;
 - If time, staff and/or financial resources are not available, the WRE should identify data/analysis gaps and resources needed before the next comprehensive plan update.





WRE TECHNICAL ASSISTANCE PROVIDERS

- MDE: Water and Science Administration
- MDP: Resource Conservation & Management Unit
- MDNR: Chesapeake and Coastal Service, Maryland Geological Survey
- Others: watershed groups, soil conservation districts, the Maryland Department of Agriculture (MDA) and nongovernmental organizations





EXAMPLES FOR WHEN TO UPDATE YOUR WRE? CLIMATE CHANGE AND FLOODING

• If:

- Your current WRE does not include any consideration of climate impacts to water resources; and/or
- Your current WRE does not identify strategies to account for current or expected water-related climate change impacts resulting from the land use plan; and/or
- Your current WRE does not consider flood risks or identify local flood prone watersheds; and/or
- Your current land use plan does not consider the effects on local flooding; and/or
- Studies or additional information are needed to assess any of the above.





Examples for When Update Your WRE?

New Information or Changes

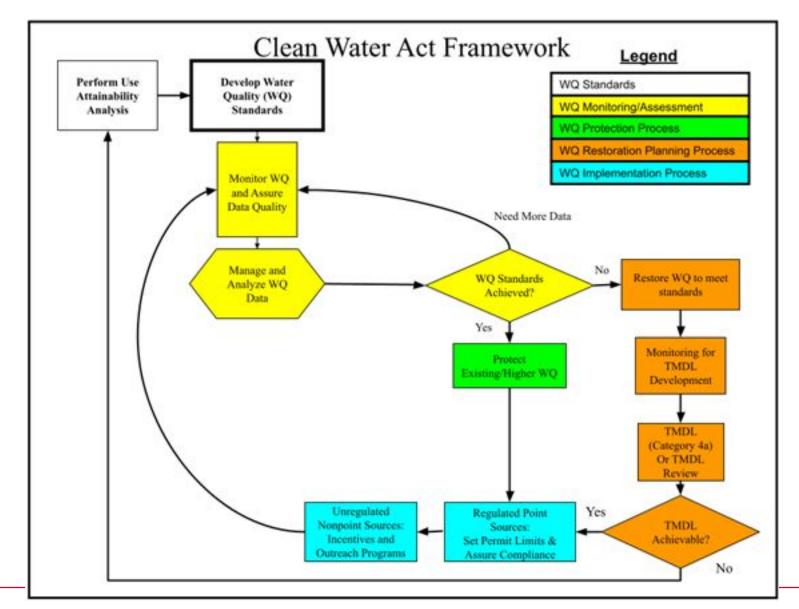
• If:

- There is significant new water resource information (i.e., water availability, impacts, TMDL status or declining quality or quantity trends, infrastructure);
- There are significant land use plan updates or changes; or
- When water and sewer demand will exceed 80% of the available wastewater capacity or water appropriation.





Maryland's Regulatory Water Management Framework







Maryland's Water Resources Management Framework to Identify Suitable Receiving Waters

- Water Quality Standards
- Water Quality Monitoring and Assessment
- Water Quality Restoration Planning Process
- Water Quality Protection Process
- Water Quality Implementation Process
- Water Quality Restoration Implementation Process
- Water Quality Protection Implementation Process
- Use Attainability Analysis
- Flood Management Process





WRE Tools and Approaches for Integrating Water-related Climate Change into Local Plans

- Best practices concerning <u>addressing water-related climate change</u> <u>issues in the Sensitive Areas Element</u> and for ensuring coordination between the WRE and the Sensitive Areas Element;
- Best practices for <u>assessing water hazard risks</u> and <u>accounting for climate change adaptation</u> in different WRE analyses;
- An overview of the Federal Emergency Management Administration (FEMA) framework for hazard management planning;
- Provides example climate change risks to water resources, water infrastructure and to communities;
- Identifies tools for data and analysis; and,
- Identifies <u>WRE strategy approaches</u> and language.



Considering Planned Growth and Development Impacts on Water Resources Through an Equity Lens

- What water resource and related infrastructure impacts will planned growth have on disadvantaged communities downstream and/or sharing the same water source?
- Identify where planned growth and development is occurring in disadvantaged areas to avoid, minimize and mitigate water resource and infrastructure impacts that exacerbate or otherwise fail to address continued inequities in the communities of concern.





TRAININGS AND FURTHER DEVELOPMENT OF THE WRE GUIDANCE UPDATE

- •During 2022, MDE and MDP will meet with local governments for small group informational sessions and to identify, discuss and implement improvements to the WRE Guidance Update.
- MDE and MDP will also be training state agency staff on how to review WRE's in light of the new guidance and to provide constructive feedback and assistance to local governments.





QUESTIONS?

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