CITY OF BALTIMORE

BRANDON M. SCOTT, Mayor



OFFICE OF COUNCIL SERVICES

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SYNOPSIS

Committee: Health, Environment, and Technology

City Council Resolution: 21-0002R

Investigative Hearing - Inland Flood Mitigation

Sponsor: Councilmember Ramos, et al Introduced: January 11, 2021

Purpose:

For the purpose of inviting the Acting Director of the Office of Emergency Management, the Acting Director of the Department of Public Works, the Director of the Department of Planning, the Director of the Office of Sustainability, and other representatives of these agencies to provide an update on efforts to mitigate and prevent inland flooding, which is not covered by the recently passed Nuisance Flood Plan.

Effective: Upon enactment

AGENCY REPORTS	
Department of Public Works	
Department of Planning	Favorable / Defers to Sustainability
Office of Sustainability	
Mayor's Office of Emergency Management	

ANALYSIS

The resolution invites City agencies to update the City Council on efforts to mitigate and prevent inland flooding, which is not covered by the recently passed Nuisance Flood Plan. Inland flooding occurs when the volume of water on land overcomes the capacity of natural and built drainage systems to carry it away. Inland flooding can be severe, potentially leading to loss of life, property damage, and disruption of essential services.

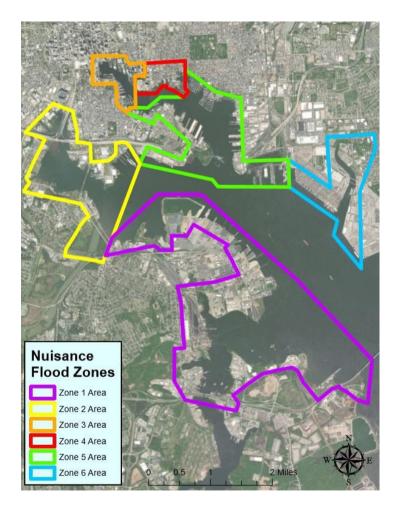


A variety of factors can contribute to inland flooding in urban areas, including:

- Periods of intense or prolonged precipitation and runoff from rapid snow melt;
- Failure of dams or levees;
- Large amounts of impervious surface area reducing water infiltration into the ground and increasing water flow to streams and built drainage systems;
- Insufficient capacity, blockage, or failure of natural or built drainage systems.

Global warming is expected to increase instances of inland flooding in many areas. Rising temperatures will likely lead to more frequent and severe precipitation events. Additionally, rising sea levels can reduce the effectiveness of drainage infrastructure when tidewater enters stormwater system outlets and prevents rainwater from draining.

Baltimore City's 2020 Nuisance Flood Plan was developed in accordance with Maryland Senate Bill 1006, Sea-level Rise Inundation and Coastal Flooding—Construction, Adaptation, Mitigation, and Disclosure. State law defines nuisance flooding as "high tide flooding that causes a public inconvenience." The City's Plan focused on six waterfront "nuisance flood zones" identified as vulnerable to high tide flooding (shown below).



ADDITIONAL INFORMATION

Fiscal Note: None

Information Source(s):

- Baltimore City 2020 Nuisance Flood Plan: <u>https://www.baltimoresustainability.org/flood-preparedness/</u>
- Section 3-1001 of the Natural Resources Article of the Maryland Annotated Code
- U.S. Climate Resilience Toolkit, Inland Flooding: <u>https://toolkit.climate.gov/topics/coastal-flood-risk/inland-flooding</u>
- U.S. Geological Survey, Impervious Surfaces and Flooding: <u>https://www.usgs.gov/special-topic/water-science-school/science/impervious-</u> surfaces-and-flooding?qt-science_center_objects=0#qt-science_center_objects
- Reporting Agencies
- Resolution 21-0002R

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Analysis by: Analysis Date:

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