WRTC Climate Resilience / Flooding Work Program COG staff working document as of 11/6/20

The Water Resources Technical Committee intends to make climate resilience, including both riverine and interior flooding issues, a major priority for the committee in 2021.

Here are some of the **topics** the WRTC could address, either through presentations and discussion at its semi-quarterly meetings, through workshops or by other means.

PLANNING

- What should a comprehensive local climate resilience strategy include? (e.g., environmental, economic, and social resilience)
- Integrating the new science on changing precipitation patterns into local climate resilience strategies, including emergency response, education and outreach efforts, and BMP design and implementation
- Accounting for combined effects of climate change and land use change

DATA

- Flood risk mapping, including tidal, riverine and inland (cloudburst) flooding
- Precipitation projections
- Land use projections

REGULATIONS AND BUILDING CODES

• Potential changes to development and redevelopment requirements, including state stormwater regulations, local building regulations, floodplain building restrictions and others

MITIGATION TOOLS

- BMP considerations, including the extent to which stormwater BMP practices can provide flood mitigation benefits and the performance of stormwater BMPs under climate change-driven weather conditions
- And, the extent to which traditional flood control practices can provide water quality, stream erosion, and other environmental benefits

FINANCING

• Financing considerations, including the potential use of federal (e.g. FEMA) and state resources (e.g., VA's Community Flood Preparedness Fund) and balancing public and private investment in mitigation efforts

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ENGAGEMENT

• Education and outreach efforts to help residents understand their risks and the extent to which such flooding can be mitigated by local governments (The COG Winter Weather Plan may provide a basis for region-wide messaging on some flooding issues.)

Speaker Ideas:

- Member roundtable presentations on all of these issues
- DC Water on the outcome of the Potomac and Rock Creek CSO remediation efforts (Seth Charde will speak at the Nov. 6 meeting)
- The Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA) program: ongoing work to develop a Climate Resilience Scorecard for the Chesapeake Bay Watershed (and other activities to date)
- Resilience Adaptation Feasibility Tool (RAFT): William and Mary, VIMs, etc.
- FEMA on its financing opportunities for local government, including its new "nature-based solutions" initiative under BRIC (FEMA Region III will speak at the proposed Jan. 8 meeting)
- Various state agencies that provide financial or other types of assistance to local governments
- National Weather Service on its "weather ready nation" initiative and quantitative precipitation forecasting in the Mid-Atlantic region
- DC Silver Jackets on its educational outreach efforts
- Corps of Engineers on various floodproofing projects around the region

Integration with NVRC's expanding climate resiliency / flooding work

NVRC preliminary climate resiliency / flooding work plan

The Northern Virginia Regional Commission proposes to work with stakeholders to develop a program that will create and promote coordinated messages across the region and provide educational resources related to climate resiliency, including riverine and interior flood hazards, in order to:

- 1. Develop a well-informed public that will understand the land use and climate trends that contribute to floods.
- 2. Encourage structural and landscape practices on private property that improve flood protection
- 3. Ensure equitable access to flood information, flood prone areas, and resources
- 4. Promote public safety by encouraging citizens to take risk reduction actions before, during, and after flood events.
- 5. Educate citizens on overland relief encroachment and ways to prevent/reduce it

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- 6. Educate citizens on flood dangers to life and property
- 7. Reduce and avoid flood damage to infrastructure, public property, and private property
- 8. Build support for public policies that reduce flood risks.
- 9. Promote improved management of floodplains, streams, watersheds, and hydraulic systems.
- 10. Help to identify practices that provide multiple water quality and water quantity benefits and cobenefits