



CHESAPEAKE BAY AND WATER RESOURCES POLICY COMMITTEE MEETING SUMMARY-DRAFT

November 15, 2019

LINK TO ALL MEETING PRESENTATIONS AND MATERIALS:

<https://www.mwcog.org/events/2019/11/15/chesapeake-bay-and-water-resources-policy-committee-meeting/>

DECISIONS & ACTIONS:

The CBPC members resolved to:

- Discuss local government climate change preparedness and stormwater resiliency needs with EPA, the Bay Program and the states at the CBPC's March 20, 2020 Forum.
- Consider developing public messaging as a committee about flooding and stormwater resiliency, including messages about the underlying issues and encouraging personal preparedness.

1. CALL TO ORDER/WELCOME & OPENING REMARKS

Chair Dyballa called the meeting to order at 10:00 a.m. Chair Dyballa thanked the committee for its accomplishments during her year as chair. She said that, pending Board approval, Jon Stehle, City of Fairfax, and Laurie-Anne Sayles are slated to be incoming Chair and co-Vice Chair, respectively.

2. CBPC MEETING SUMMARY APPROVAL

The Summary from the September CBPC meeting was approved.

3. STORMWATER RESILIENCY: WHAT IS NEEDED FOR THE FUTURE?

A. Back to a more integrated future? What is 'stormwater resiliency' and how does it inform the future of stormwater management?

Karl Berger, COG, compared stormwater management to control for water quantity versus water quality. He stated that pre-1980's the emphasis for stormwater was to address flooding, then in the 1980s-2000's there was a shift towards using stormwater best management practices to reduce nutrient run off, given the Bay water quality focus. Now local governments are reexamining the balance between these two goals as more land gets developed and resilience to intense rain storms is becoming increasingly important; there is an increasing need to address flooding and protect human health and property. Mr. Berger closed with posing a question: Will stormwater resiliency best be met with gray or green infrastructure or a combination?

B. Stormwater and climate change research and planning

Norm Goulet, Northern Virginia Regional Commission, shared updates about the Chesapeake Bay Program's (CBP) climate change modeling. Climate change has become an accepted paradigm and the Phase 6 Model is being updated to incorporate climate change, to better understand potential impacts of sea level rise and changing precipitation on the Bay's ability to assimilate nutrient loads. The CBP's Climate Resiliency Work Group was formed in 2015. In 2018, the Bay Program held a Scientific and Technical workshop that explored the potential for climate change to impact Best Management Practices (BMPs) for agriculture and stormwater, including nutrient removal performance and the effects of changing precipitation and storms on

streams and the Bay. The Bay Program is emphasizing the importance of co-benefits in addressing climate change, especially those that protect infrastructure and human health and safety.

The Bay Program's Urban Stormwater Work Group received a \$150,000 grant to update stormwater intensity, duration, frequency design curves ("IDF" curves) for the District and Virginia, using a science-based approach to downscale climate information for engineering purposes. Maryland's design curves are being updated via a Chesapeake Bay Trust grant. Lastly, Mr. Goulet covered the Chesapeake Stormwater Network's plans. They will be conducting interviews of local, state, and federal government officials, and academics, to get a sense of stormwater costs and funding needs. The Chesapeake Stormwater Network is also conducting "infrastructure risk analysis" research—to answer questions such as how changing storm patterns will affect the ability of current and future best management practices (BMPs) to reduce pollutants, and the amount of rainfall BMPs should be designed to capture in the future (i.e., answer whether structures will need to be resized by 1.5 times more, or 2.5 times more).

Member discussion

- A member questioned the design curve updates, saying this work seems esoteric. What can elected officials tell their constituents now who are concerned about climate resiliency? Mr. Goulet replied that using a science-based approach does take time but will help with cost-effectiveness so that BMPs are not over-sized or under-sized.
- Another member pointed out that we need to prepare residents for Mother Nature's extremes. She gave a bath tub example—no matter how large the drain (i.e., the stormwater solution), the bath tub can only drain water so quickly, so we cannot fully eliminate risk via engineering.

C. How are local governments starting to think about stormwater resiliency?

Mark Richmond, Howard County, spoke about Ellicott City, which experienced two historic 1,000-year storms, in July 2016 and May 2018. He used a funnel as an analogy: When there are high intensity, short duration storms the funnel opening is too small and the system's capacity becomes overwhelmed. During the second storm, some of the permanent fixes from the first storm held up, but temporary ones did not.

Considering the historic flooding, Ellicott City has taken the following measures:

- The County Executive is developing a "Safe and Sound" Plan.
- Messaging to residents that they must be proactive in implementing Army Corps of Engineering flood prevention measures which include raising HVACs, blocking off windows and doors in basements, and getting County flood mitigation grants.
- Ellicott City has a one-year moratorium on development in certain areas, while updating its design manual.
- The stormwater division is doing proactive outfall maintenance, triggered by two inches of rain within 24 hours, in two dozen locations, to keep them free of clogging woody debris.
- Current stormwater control is based on Environmental Site Design. Historical parts of the city were built prior to stormwater management, with the intention to move water, not detain it.
- The City has implemented some measures to enhance public situational awareness, including evacuation sign boards, flash flooding audible alerts, videos of river gauges, and coordination with the National Weather Service.

Some of Mr. Richmond's lessons conveyed included:

- You can't stop the rain. You can try to reduce storm impacts, by "slowing the flow"

- Take steps to improve resiliency piece by piece, since it can feel overwhelming.
- Stormwater Management is not without controversy (i.e., property acquisition; permitting and stormwater management on historic properties).
- Howard County is doing regionwide and statewide coordination of approaches
- Don't regulate in a vacuum.
- Resiliency funding is key, so try to find grants and loans

Jason Papacosma, shared Arlington County's recent storm and flooding challenges and how the County is re-positioning their stormwater programs for greater "resiliency," an emerging concept.

- Arlington County was largely built post-World War II, with housing and streets built on top of streams channeled underground via pipes. During heavy rains there is overland flooding since the storm drains are overwhelmed and there is no overland relief (no place for the water to drain).
- In July's 100-500 year rainfall event, some basements had ten feet of water.
- Regulations are one piece of the stormwater puzzle. For a while stormwater has focused on water quality; however, this goal needs to be integrated with stormwater resiliency to meet local needs on limited budgets. This aligns with Virginia's Phase III WIP, which is emphasizing finding co-benefits.
- The number one source of impervious surface in Arlington County is redevelopment: Smaller homes are being replaced (80% of home built before 1980) by larger homes with more imperviousness.
- As its "Flood Resilient Arlington" initiative, the County is developing a risk assessment and management plan, based on mapping and projections, and based on the concept of slowing water down, soaking it in.
- Other pieces to Arlington County's stormwater picture including the pending new MS4 permit, land development permitting 2.0, and a stormwater utility feasibility study.
- Overall message: We can reduce flood risk but won't eliminate it. Floodproofing won't help when there are severe storms.

Member discussion

- A member said the parcel by parcel permitting process seems flawed: It does not look at development/redevelopment holistically, in terms of its overall impervious impacts.
- Members discussed FEMA:
 - In order to get FEMA support for removing properties, must have a record of repetitive losses claimed; some property owners don't submit these claims.
 - Members said FEMA grants are awarded based on a benefit/cost comparison and benefits must outweigh costs. Awards seem to be skewed against small towns.

4. MEMBER & STAFF UPDATES

A. Councilmember Jon Stehle

Mr. Stehle announced that there would be updates at the January 2020 meeting from the Ag Task Force about regional agricultural funding needs.

B. COG staff

Ms. Bonnaffon drew member attention to the proposed 2020 CBPC Meeting Schedule and 2020 Legislative Priorities for Water. She requested feedback on both within a week, before being finalized. Ms. Bonnaffon provided General Updates highlights, including a \$12 M increase in funding for the Chesapeake Bay Program. She also said COG's Community Engagement Campaign was running PSAs about Thanksgiving Fats, Oils, Grease on WTOP radio, reminding regional residents to throw cooking grease and oil in the trash, to protect wastewater

infrastructure.

5. WRAP UP & ADJOURNMENT OF MEETING

Chair Dyballa adjourned the meeting at 12:00 p.m.

ATTENDANCE

Members and Alternates:

Cindy Dyballa, Chair, Takoma Park
Dan Sze, Falls Church
Elissa Silverman, District of Columbia
Frank Dawson, Montgomery County
J. Davis, Greenbelt (phone)
Joe Gill (phone)
Joel Caudill (phone)
Jon Stehle, City of Fairfax (phone)
Karen Pallansch, Alexandria Renew (phone)
Laurie-Anne Sayles, City of Gaithersburg
Libby Garvey, Arlington County
Matt Ries, DC Water
Pam Kenel, Loudoun Water
Patty Bubar, Montgomery County
Penny Gross, Fairfax County

Sam Rosen-Amy, District of Columbia
Stephen Allen, Laurel
Steve Shofar, Montgomery County
Tiffany Wright, Bowie (phone)

Guests:

Jason Papacosma, Arlington County
Mark Richmond, Howard County
Norm Goulet, NVRC

COG Staff:

Brian LeCouteur
Mukhtar Ibrahim
Heidi Bonnaffon
Karl Berger
Lindsay Smith
Lisa Ragain
Lisa Reynolds