



**Joint Meeting of the  
Urban Stormwater Workgroup and  
Climate Resiliency Workgroup  
October 18-19, 2021**

Join by Webinar (DAY 1 Link):

Meeting Link:

<https://umces.webex.com/umces/j.php?MTID=m4b005a2653f86d4e0ad53a047f99f089>

**Meeting number:** 2623 459 1134

**Password:** 2VNsPyZYT43

OR

**Phone:** 1-408-418-9388 United States Toll

**Access code:** 262 345 91134

**Event webpage:**

**Day 1:**

[https://www.chesapeakebay.net/what/event/climate\\_resiliency\\_workgroup\\_crwg\\_october\\_2021\\_meeting](https://www.chesapeakebay.net/what/event/climate_resiliency_workgroup_crwg_october_2021_meeting)

*This meeting will be recorded for internal use to assure the accuracy of meeting notes.*

**Day 1: October 18, 2021**

**1:30 Announcements, Introductions and Meeting Objectives – Norm Goulet (USWG Chair), Mark Bennett (CRWG Chair), Julie Reichert-Nguyen (CRWG Coordinator), and David Wood (USWG Coordinator)**

**1:45 EnviroAtlas – Anne Neal and Jessica Daniel (US EPA)**

Anne and Jessica will present information on EnviroAtlas and metrics related to flooding, precipitation, tree canopy, and carbon sequestration. EnviroAtlas provides geospatial data, easy-to-use tools, and other resources related to ecosystem services, chemical and non-chemical stressors, and human health. We will discuss how EnviroAtlas could potentially be used to support the prioritized climate change indicators.

**2:15 Chesapeake Bay BMP Climate Synthesis Report – Jeremy Hanson and Zach Easton (Virginia Tech)**

Jeremy and Zach will provide an update on the BMP climate resilience assessment on nature-based, agriculture, and stormwater BMPs from their modified systematic literature review, sponsored by the CBP Scientific and Technical Advisory Committee (STAC) and NOAA. This review will assist the CRWG and other CBP workgroups to identify knowledge gaps to build into a research agenda as requested by the CBP Principal Staff Committee (PSC).

**2:45 Break**

**2:55 Stormwater BMP Vulnerabilities to Climate Change -- David Wood (CSN)**

David will outline the key findings from a series of four memos on maintaining the resilience of stormwater BMPs. The memos cover the current stormwater design standards across the Chesapeake Bay Watershed, a synthesis of local climate projections, and likely vulnerabilities in our stormwater infrastructure. Resilient design considerations will also be covered.

An archived recording with an extended version of this presentation is [available here](#).

**3:15 Considerations and Next Steps for More Resilient Stormwater BMP Design – Dr. Jon Hathaway (University of Tennessee), David Wood and Tom Schueler (CSN)**

Dr. Hathaway will present the latest research on climate change implications for stormwater BMP performance and design. Then, Tom and David will propose a framework for local adaptation strategies to promote urban watershed resilience.

**3:45 Discussion and Wrap Up**

Participants will discuss and provide input on the proposed urban watershed resilience framework, which includes developing pilot “next generation Bay-wide design specifications”, as well as other topics from the day. Discussion will be used to draft recommendations for the WQGIT and MB.

**4:00 Adjourn**



**Joint Meeting of the  
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Join by Webinar (DAY 2 Link):

Meeting Link: <https://umces.webex.com/umces/j.php?MTID=m500ad3ecde853bc09a2a1256ac93ce8b>

**Meeting number:** 2620 322 6323

**Password:** 6r2GTsjum2M

OR

**Phone:** +1-408-418-9388 United States Toll

**Access code:** 2620 322 6323

**Event webpage:**

**Day 2:**

[https://www.chesapeakebay.net/what/event/urban\\_stormwater\\_workgroup\\_conference\\_call\\_october\\_2021](https://www.chesapeakebay.net/what/event/urban_stormwater_workgroup_conference_call_october_2021)

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**Day 2: October 19, 2021**

**10:00 Announcements and Recap of Day 1 – Norm Goulet (USWG Chair) and David Wood (USWG Coordinator)**

**10:20 Chesapeake Bay Climate Change-Informed IDF Curves – Michelle Miro (RAND)**

Michelle will provide an overview of the newly completed climate change-informed intensity duration frequency (IDF) curves. She will then provide a quick demo of the web tool and lead a discussion on next steps and continuing research to further refine the tools and make them more useful for design applications.

An archived recording with an extended version of this presentation is [available here](#).

**10:50 Resilient Stream Restoration Design – Ward Oberholzer (LandStudies) and Scott Lowe (McCormick Taylor)**

This session will focus on climate change impacts on stream restoration design. Scott and Ward will use a hypothetical restoration scenario to discuss how increasing precipitation intensity may impact:

- Reach sediment loading in the absence of any restoration
- How the higher flows would influence overall project design and feasibility
- Prospects for floodplain reconnection
- The implications for more armoring
- Project longevity and possible sediment/nutrient remobilization

- And more...

### **11:20 Discussion and Morning Recap**

Participants will discuss potential next steps and research recommendations for future refinements to the climate-change informed IDF curves and associated tools. They will also discuss how best to advance resilient stream restoration planning and design.

### **11:45 Break**

### **12:15 Climate-Impacts to Restoration Practices – Jon Butcher (Tetra Tech)**

Jon will present his work projecting climate change-informed IDF curves in Maryland. Jon will also discuss the resulting analysis of the practical consequences of the predicted changes in precipitation and runoff including future BMP performance, flood risk, and channel instability.

### **1:00 Resilient Floodplain Management – Jason Coleman (RK&K), Tom Schueler, CSN,**

Jason and Tom will discuss how the proposed changes in IDF curves would affect current and future flood boundaries from the perspective of floodplain managers. In this session, we will cover the status of floodplain mapping efforts, the effect of current factors or safety on flooding, and possible floodplain management strategies may make sense to pursue.

### **1:30 Moving Towards Implementing Resilient Design Principles – Michelle Miro (RAND), Alan Cohn (NYC DEP), Ben McFarlane (HRPDC)**

This session will focus on options for watershed managers interested in applying projected IDF curves in their stormwater programs or implementing alternative resilient design principles. This discussion will feature case studies from Hampton Roads and New York City and set the stage for possible recommendations for other Bay managers.

### **2:15 Discussion, Wrap Up, and Next Steps**

Participants will discuss the afternoon presentations, with the goal of producing a series of recommended action items and next steps for the workgroups and other partners.

### **2:45 Adjourn**