**Scientific and Technical Working Group Meeting**

**August 16, 2024**

**1:00 - 2:30 pm**

**By ZOOM**

[https://umces-edu.zoom.us/j/89704817942?pwd=NExJtVzqBNr1BMSrCbWiYKqaD9q6OL.1](https://www.google.com/url?q=https://umces-edu.zoom.us/j/89704817942?pwd%3DNExJtVzqBNr1BMSrCbWiYKqaD9q6OL.1&sa=D&source=calendar&ust=1716169482046619&usg=AOvVaw1e_F0o9-nuBBVdjW3yGxMI)

Meeting ID: 897 0481 7942

Passcode: 885982

**Meeting Agenda**

*Times shown are approximate and subject to change*

1. Welcome and Roll Call

 Dr. Bill Dennison and Dr. Fernando Miralles-Wilhelm

2. New Methodology for Quantifying Agricultural Soil Carbon

Vimal Amin (MDE), Alisha Mulkey (MDA?), and Rachel Lamb (MDE) *[20 minutes]*

3. Discuss draft recommendations [*45 minutes*]

4. Public Comment *[5 minutes]*

**Publications of Relevance to the**

**Maryland Commission on Climate Change**

**General Interest**

National Academies Report:*Accelerating Decarbonization in the United States* *–* October 2023

White House announcement on release of Nature Based Solutions Roadmap. November 2022.
https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/08/fact-sheet-biden-%E2%81%A0harris-administration-announces-roadmap-for-nature-based-solutions-to-fight-climate-change-strengthen-communities-and-support-local-economies/

IPCC Working Group II Sixth Assessment Report: Climate Change 2022 - Impacts, Adaptation and Vulnerability: https://www.ipcc.ch/report/ar6/wg2/

American Society of Civil Engineers

Responding to Code Red

*Civil Engineering* January 2022. 36-45

Impacts of Future Weather and Climate Extremes on United States Infrastructure: Assessing and Prioritizing Adaptation Actions

Book authored by the ASCE Task Committee on Future Weather and Climate Extremes. December 2021.

Which racial/ethnic groups care most about climate change?

https://climatecommunication.yale.edu/publications/race-and-climate-change/

Professor Matt Fitzpatrick (UMCES) on the shifting climate of America's cities.

https://www.bostonglobe.com/2021/06/29/metro/boston-has-seen-baltimore-style-heat-june-it-might-be-preview-summers-come/

The tool is available at:

https://www.umces.edu/futureurbanclimates

Location of Maryland's Air Monitoring Stations

https://mde.maryland.gov/programs/Air/AirQualityMonitoring/PublishingImages/MonitoringNetwork.png

NOAA National Integrated Heat Health Information System

https://nihhis.cpo.noaa.gov/

NOAA analysis of new climate normals

https://www.noaa.gov/news/new-us-climate-normals-are-here-what-do-they-tell-us-about-climate-change

Maryland's Coast Smart Climate Ready Action Boundary (CRAB) Tool

 https://mdfloodmaps.net/CRAB/

**Environmental Justice**

Scientific American/E&E News, 2023.

*This part of the US. will suffer most from climate change*

Centers for Disease Control and Prevention: Environmental Justice Index

https://www.atsdr.cdc.gov/placeandhealth/eji/index.html

FEMA : National Risk Index of Natural Hazards

https://www.fema.gov/flood-maps/products-tools/national-risk-index

EPA (2022): EJ Screen

https://www.epa.gov/ejscreen

White House (2023): Climate and Economic Justice Screening Tool

https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5

**Policy**

Inequitable patterns of US Flood risk in the Anthropocene.

O.E.J. Wing et al.

Nature Climate Change | VOL 12 | February 156 2022 | 156–162 | www.nature.com/natureclimatechange

Opportunities for U.S. State Governments and in-Region Partners to Address Ocean Acidification through Management and Policy Frameworks. Turner, J. et al., August 1, 2021
https://www.tandfonline.com/doi/full/10.1080/08920753.2021.1947126

Additional background on BIL/IIJA implementation in Maryland: https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Commission/Governors%20Infrastructure%20Subcabinet%20presentation.pdf

**Science**

EPA. Climate Change Indicators

https://www.epa.gov/climate-indicators

**Technology**

Maryland Energy Innovation Accelerator: Creating Investible Clean Energy Businesses

October Newsletter and signup for updates

https://mdeia.org/

International Energy Agency.

Dramatic action is required in the next decade to have any hope of achieving a net-zero goal by 2050, IEA said. Where electric vehicles now account for 5% of global automobile sales, they will need to represent 60% of new automobile purchases in 2030. Annual renewable installations, which hit a record 280 gigawatts last year, will need to exceed 1,000 GW. And energy efficiency improvements will need to grow by 4% annually, roughly three times their current rate.  Read the article:

 https://www.scientificamerican.com/article/net-zero-emissions-by-2050-are-possible-landmark-report-says/

Future World Vision: Mega City 2070

futureworldvision.org (available after February 22, 2022).

**Engineering**

American Society of Civil Engineers (June 2023)

 Resilience Toolkit

 ASCE-NOAA Workshops to Inform Engineering Design

American Society of Civil Engineers (August 2022)

 Objective Resilience: Policies and Strategies

 Manual of Practice 146

 Objective Resilience: Objective Processes

 Manual of Practice 147

 Objective Resilience: Technology

 Manual of Practice 148

 Objective Resilience: Applications

 Manual of Practice 149

 Further details available at ASCE:

**Human Health**

Maryland Climate and Health Program webpage: https://health.maryland.gov/phpa/OEHFP/EH/Pages/climate\_change.aspx

Maryland Environmental Public Health Climate Adaptation Tracker: https://maps.health.maryland.gov/climatechange/

**Webinars and Other Events**

*Webinars*

*Workshop:* Nature-Based Solutions. November 30, 2022. https://mailchi.mp/nas/register-now-measuring-what-matters-comprehensive-and-equitable-evaluation-of-benefits?e=223b065c1c

*Collaborative activities on blue carbon in Maryland*

*Living Shorelines in Practice - Enhancing Coastal Resilience*

*https://drive.google.com/file/d/18grfKQesGi6yHGoKpmI61iRZ0kYCS64v/view*

*https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/STWG/Blue%20Carbon%20in%20Maryland%20presentation.pdf*

*Coastal Adaptation* *Report Card. 2021*

*https://www.youtube.com/watch?v=v4ivioWna94&t=20s*

*https://virginia.planning.org/conferences-and-meetings/mid-atlantic-planning/?utm\_medium=email&utm\_source=govdelivery&utm\_term=*

*Recordings:*

**Adaptation For All**

is available at: https://nlintheusa.com/adaptation-for-all/

**Flood Resilience in the Year Ahead: Opportunities for the New Congress**

is available to watch here: https://www.youtube.com/watch?v=dI91vyl6GYw