

Scientific and Technical Working Group Meeting

June 21, 2024

1:00 - 2:30 pm

By ZOOM

<https://umces-edu.zoom.us/j/89704817942?pwd=NExJtVzqBNr1BMSrCbWiYKqaD9q6OL.1>

Meeting ID: 897 0481 7942

Passcode: 885982

AGENDA

Times shown are approximate and subject to change

1. Welcome, Introductions, and Roll Call
Dr. Bill Dennison (STWG Chair)
2. Methane mechanisms in natural and restored Maryland Wetlands
Dr. Stephanie Yarwood, University of Maryland, College Park *[40 minutes]*
3. Methane Discussion *[25 minutes]*
4. STWG Updates
Dr. Bill Dennison *[10 minutes]*
 - July and August meeting plan
 - woody biomass field trip
5. Other Activities, Relevant Publications, or Announcements from STWG members *[10 minutes]*
6. 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-summer-comes-coming/>

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/18grfKOesGi6yHGoKpmI61iRZ0kYCS64v/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>