

Scientific and Technical Working Group Meeting

October 21, 2022
2:00 - 3:00 pm

By ZOOM

<https://umces-edu.zoom.us/j/81913871322?pwd=bFBCT0ZDTnN5enpNWmJ4UFMzdTRFQT09>

Meeting ID: 819 1387 1322

Passcode: 057392

One tap mobile

+13017158592,,81913871322#,,,,*057392# US (Washington DC)

Meeting Objective:

- Finalize STWG section of the 2022 MCCC Annual Report

Times shown are approximate only

1. Welcome, Introductions, and Roll Call
Peter Goodwin, STWG Chair
2. Approval of September Meeting Summary
3. Public Comment. *[10 minutes]*
4. Discussion of STWG input to 2022 MCCC Annual Report *(40 Minutes)*
5. Summary of Action Items and Closure [Nemazie] *[5 minutes]*

2022 Publications of Relevance to the Maryland Commission on Climate Change

General Interest

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/>

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/>

Policy

Inequitable patterns of US Flood risk in the Anthropocene.

O.E.J. Wing et al.

[Nature Climate Change](https://www.nature.com/natureclimatechange) | 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>

Special Section. *Science*. 18 June 2021. p1224-1299. Fallback Strategies: Planning for Climate-Induced Relocation.

Wang, J., Chen, Y., Tett, S.F.B. *et al.* Anthropogenically-driven increases in the risks of summertime compound hot extremes. *Nat Commun* **11**, 528 (2020).

<https://doi.org/10.1038/s41467-019-14233-8>

Technology

Maryland Energy Innovation Accelerator: Creating Investible Clean Energy Businesses
October Newsletter and signup for updates

<https://mdeia.org/>

Decarbonizing the Power Grid

<https://www.redoxblox.com>

Developing a Research Agenda and Research Governance Approaches for Climate Intervention Strategies that Reflect Sunlight to Cool Earth

<https://www.nationalacademies.org/our-work/developing-a-research-agenda-and-research-governance-approaches-for-climate-intervention-strategies-that-reflect-sunlight-to-cool-earth>

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 (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: Exploring Best Practices for Large-scale Marsh Persistence and Restoration in the Chesapeake Bay.

October 6, 2022. Virtual and In-person

Maryland Sea Grant and Chesapeake Bay Sentinel Site Cooperative

*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>

*Collaborative activities on blue carbon in Maryland: Living Shoreline webinar
Living Shorelines in Practice - Enhancing Coastal Resilience*

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=

Mitigating Climate Change - NSF 2021 Workshop

<https://web.cvent.com/event/c630ff92-7038-4d79-904d-09f0d8331622/summary>

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>