

Scientific and Technical Working Group Meeting

February 18, 2021

AGENDA

Objectives: Review 2022 STWG Activities - including expected requests from MCCC or other Working Groups
Update on Regional GHG

Times shown are approximate only

1. Welcome, Introductions, and Roll Call
Peter Goodwin, STWG Chair
2. Approval of November Meeting Summary
3. Legislative Update on Climate Issues [Nemazie] [5 minutes]
Climate Solutions Now Act of 2022
<https://mgaleg.maryland.gov/2022RS/bills/hb/hb0904f.pdf>
Building Standards and Emissions Reductions – High Performance, State, and Local Government Buildings, State Operations, and Eligible Projects
<https://mgaleg.maryland.gov/2022RS/bills/hb/hb0806F.pdf>
Reducing Greenhouse Gas Emissions - Commercial and Residential Buildings
<https://mgaleg.maryland.gov/2022RS/bills/hb/hb0831F.pdf>
4. Expected 2022 Priorities for MCCC [Stewart/Breitenother/Mekuria]. [15 minutes]
5. Suggestions on enhancements to the Coastal Adaption Score-card [Goodwin] [5 minutes]
<https://ian.umces.edu/site/assets/files/28119/2021-maryland-coastal-adaptation-report-card.pdf>
<https://www.youtube.com/watch?v=v4ivioWna94>
6. Review Tentative Schedule for 2022 STWG Activities (attached below) [All] [20 minutes]
7. Update on Regional GHG Emissions [Dickerson] [15 minutes]
8. 'Pop-Up' Significant Science Findings and Emerging Technologies of Relevance to MCCC
STWG Members are invited to comment. [10 minutes]
9. Public Comment. [5 minutes]
10. Summary of Action Items and Closure (Nemazie)

Recent Publications

General Interest

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-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/>

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>

Science

EPA. Climate Change Indicators 2021
<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).

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

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

<https://drive.google.com/file/d/18grfKQesGi6yHGoKpml61iRZ0kYCS64v/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 Card

<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>



Tentative 2022 STWG Meeting Schedule - **For Discussion**

Month	Primary Topic Area	External Speakers/Panelists
February	Regional GHG Update and 2022 STWG Activities	None
March	Increasing Risks of Coastal Flooding in Maryland	Dr. Li and other groups
April	Making Infrastructure Resilient to Climate Change	TBD ASCE Speaker
May	Net Zero Infrastructure - the UK perspective	TBD
June		
July	IPCC 6th Assessment Report Review <i>Depends on date of release of the full AR6</i>	<i>With members of other Working Groups</i>
August		
September	MCCC Annual Report Discussion	
October		
November		
December	<i>No meeting unless requested by MDE.</i>	

