# MARYLAND COMMISSION on **CLIMATE CHANGE**

#### Scientific and Technical Working Group Meeting

November 19, 2021: 2:00 - 3:30pm

**By ZOOM** 

https://zoom.us/j/94314135387?pwd=M09IV1ISVTBUanZkM0xaYm5nUIVhUT09

Meeting ID: 943 1413 5387 Passcode: 340287

By Phone: +1 301 715 8592 US (Washington DC)

#### **Special Panel to Discuss Outcomes of COP26.**

World leaders, government representatives, business leaders, experts from NGOs, research institutions and the world's press gathered in Glasgow earlier this month at the COP26 summit. Attention focused on progress toward the goals of the Paris Agreement and what actions need to be taken to limit global warming to the 1.5°C tipping point identified by the IPCC. An agreement was reached to significantly reduce greenhouse gas emissions, adaptation strategies to protect communities and natural habitats, financial aid to support vulnerable developing countries that have contributed little to GHG emissions, financing change, and identifying new ways to build partnerships. The panel and the STWG discussion will reflect on outcomes of COP26 and implications at the local, national, and international level.

Peter Goodwin (STWG Chair) will moderate the panel that will include:

- The Honorable Ben Grumbles, Secretary, Maryland Department of the Environment
- Felicia Marcus, William C. Landreth Visiting Fellow, Stanford University
- Tom Soo, Executive Director, International Association for Hydro-Environment Engineering and Research (IAHR)

### The Honorable Ben Grumbles, Secretary, Maryland Department of the Environment Baltimore, Maryland



Ben Grumbles is Maryland's Secretary of the Environment. He was appointed by Governor Larry Hogan and confirmed by the Maryland Senate in 2015. His duties also include serving as Chair of the Governor's Chesapeake Bay Cabinet and the Maryland Climate Change Commission, Vice-Chair of the Regional Greenhouse Gas Initiative, and President of the Environmental Council of the States, a national organization of all of the environmental secretaries or top administrators of the 50 states. Ben has served previously as President of the U.S. Water Alliance, EPA Assistant Administrator for Water, EPA Acting Associate Administrator for Congressional and Intergovernmental Relations, Director of Arizona Department of Environmental Quality, and senior staffer and counsel for the Transportation and Infrastructure and Science Committees in the U.S Congress.

**Felicia A. Marcus**William C. Landreth Visiting Fellow, Stanford University California.



Felicia Marcus is the William C. Landreth Visiting Fellow at Stanford University's Water in the West Program, an attorney, consultant and member of the <u>Water Policy Group</u>. She most recently served as chair of the California State Water Resources Control Board, implementing laws regarding drinking water and water quality and state's water rights, hearing regional board water quality appeals, settling disputes and providing financial assistance to communities to upgrade water infrastructure.

Before her appointment to the Water Board, Marcus served in positions in government, the non-profit and private sector. In government, Felicia served as the regional administrator of the Environmental Protection Agency's Pacific Southwest region during the Clinton Administration, where she was known for her work in bringing unlikely allies together for environmental progress, particularly Indian Tribes, communities of color, local

government and agricultural and business interests. Preceding the EPA, Marcus served as the president of the board of Public Works for the City of Los Angeles presiding over the department through a time of great change and challenge, including numerous emergency response situations (including flood, earthquake and riots).

In the non-profit world, she was the western director for the Natural Resources Defense Council, and prior to that the executive vice president and chief operating officer of the Trust for Public Land. She has a Bachelor of Arts in East Asian Studies from Harvard College, and Juris Doctor degree from New York University School of Law.

**Tom Soo, Executive Director, IAHR.** [www.iahr.org] Madrid, Spain.



Tom Soo is an executive and consultant in water resources management. He brings over 20 years of international experience in leadership, institutional development, providing technical and management expertise as well as program coordination. He has been Executive Director of IWRA and the World Water Council and also has a background in consulting to international institutions, public authorities, academia, as well as private industry. Tom's current focus areas include institutional arrangements, strengthening the link between knowledge generation and policy making; water quality; building networks between private industry, research and government stakeholders; as well as strategy and technical consulting in the sector of water and natural resources. Over the years, Tom has participated in numerous international committees and task forces. He holds graduate degrees in geography and computer systems engineering. He currently serves as Executive Director of the International Association of Hydro-Environmental Engineering

and Research, the Steering Committee of the Global Water Partnership, chairs the International Advisory Committee of the UNSW Global Water Institute and the Membership Committee of the IWRA.

## Recent Publications of Relevance to the Maryland Commission on Climate Change

#### **General Interest**

Which racial/ethnic groups care most about climate change?

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

New EU Climate Change Plan July 14, 2021

https://www.bbc.com/news/world-europe-57833807

Current Heatwave affecting US Northwest and Canada https://www.bbc.com/news/world-us-canada-57678054

Current Heatwave Virtually Impossible without Climate Change

https://www.bbc.com/news/science-environment-57751918

with further details behind the study at:

https://www.worldweatherattribution.org/

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

EPA Releases Delayed Climate Report

https://www.bbc.com/news/world-us-canada-57095347

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/

Center for Progressive Reform: Impacts of Toxic Floodwaters in VA:

http://progressivereform.org/our-work/energy-environment/virginia-toxic-floodwaters/

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**

EDF, Recapturing U.S. Leadership on Climate: Setting an ambitious and Credible Nationally Determined Contribution. March 2021.

https://www.edf.org/climate/recapturing-us-climate-leadership

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/

Preparing for Wind and Water Civil Engineering. ASCE. July 2021

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/

#### **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

UMCES Fall Webinar Series on Climate Change <a href="https://www.usmf.org/s4c/">https://www.usmf.org/s4c/</a>

Recordings:

**Adaptation For All** 

is available at: <a href="https://nlintheusa.com/adaptation-for-all/">https://nlintheusa.com/adaptation-for-all/</a>

Flood Resilience in the Year Ahead: Opportunities for the New Congress is available to watch here: <a href="https://www.youtube.com/watch?v=dI91vyl6GYw">https://www.youtube.com/watch?v=dI91vyl6GYw</a>

**1st IAHR Online Forum** (replaces the Biennial World Congress due to COVID). Two sessions of potential interest to MCCC *Future of Water Infrastructure:* https://www.iahr.org/index/detail/412

Nature-Based Solutions for Water Security: https://www.iahr.org/index/detail/414