



## Climate Resiliency Workgroup

August 17th, 2023

1:30-4:30 PM EST

Join by Webinar:

<https://umces.webex.com/umces/j.php?MTID=m9c00926b79f126add1c7a4bdedf7d277>

Join by Phone:

+1-408-418-9388 and enter access code: 2623 571 3048

Meeting password: imU52MjMzU6

Event webpage:

<https://www.chesapeakebay.net/what/event/climate-resiliency-workgroup-meeting-august-2023>

*This meeting will be recorded for internal use to assure the accuracy of meeting notes.*

## **Agenda**

**1:30 PM**      **Welcome, Opening Remarks, and Announcements – Mark Bennett, Co-Chair (USGS), Jackie Specht, Co-Chair (MD Department of Natural Resources), and Julie Reichert-Nguyen, Coordinator (NOAA) [5 minutes]**

### *Focus of meeting:*

- *Share tidal recommendations from the Rising Water Temperature STAC Workshop Report.*
- *Presentations on marine heatwave research and fish habitat research related to change in environmental conditions.*
- *Discuss ideas for a marine heatwave-fisheries alert indicator (addresses recommendation in workshop report).*

### *Workgroup Announcements:*

- *NOAA's Office of Habitat Conservation is accepting proposals for their [Transformational Habitat Restoration Funding](#), which prioritizes habitat restoration actions that rebuild productive and sustainable fisheries, contribute to the recovery and conservation of threatened and endangered species, use natural infrastructure to reduce damage from flooding and storms, promote resilient ecosystems and communities, and*

yield socioeconomic benefits. There will be up to \$240 million available with individual projects funded between \$1 to \$25 million. For more information on previously funded projects, [click here](#). Proposals are due November 17<sup>th</sup>, 2023.

- Letters of Intent for NOAA's [Climate Resilience Regional Challenge](#) are due August 21<sup>st</sup>, 2023. This opportunity offers approximately \$575 million in grants for projects designed to build the resilience of coastal communities when faced with extreme weather and other impacts from climate change.
- The next [Chesapeake Community Research Symposium](#) will take place June 10-12, 2024 at the Crowne Plaza Hotel in Annapolis, Maryland. The scope of the symposium will include presentations on environmental research and science. The theme of the 2024 symposium is **Chesapeake Bay Restoration: Managing Water Quality for Living Resources in a Changing Climate**. The deadline for proposals is October 2, 2023. Proposals may be submitted to [allison@greenfinstudio.com](mailto:allison@greenfinstudio.com). Please keep the proposal length to 1000 words or less.
- The current [Climate Monitoring and Assessment Indicators](#) are officially updated with 2021 data on Chesapeake Progress. The two indicators track Total Annual Precipitation and Average Air Temperature throughout the Chesapeake Bay Watershed.
- USGS recently funded two separate projects that connect to climate change considerations:
  - **Coastal wetland vulnerability to climate change and sea-level rise: understanding ecological thresholds and ecosystem transformations** (Michael Osland, Kurt Kowalski, Glenn Guntenspergen, Joel Carr, Neil Ganju, Greg Noe, Eric Grossman, Kristin Byrd, Judith Drexler, Karen Thorne, Kevin Buffington, Jessica Lacy, Davina Passeri, Stephanie Romañach, Camille Stagg, Nicholas Enwright, Ken Krauss, James Grace)
  - **Thresholds in fluvial fish vulnerability to climate change-induced flow alteration.** (Taylor Woods, Kelly Maloney, Tim Counihan, Kenny Eng, James McKenna Jr., Kirk Rodgers, Daniel Wieferich, Tanja Williamson, Robert Zuellig)

**1:35 PM      Rising Water Temperature Tidal Recommendations (Jamileh Soueidan, CRC) [25 Minutes]**

Jamileh will present on the tidal findings from [the STAC Rising Water Temperature Workshop](#). These findings include management implications, recommendations, and their associated science needs, which all aim to address increasing water temperatures in the tidal portions of the Chesapeake Bay.

**2:00 PM      Considerations for Integrating Marine Heat Wave Information to Indicate Potential Impacts to Fisheries (Julie Reichert-Nguyen, NOAA) [20 Minutes]**

Julie will present recent efforts to support the Rising Water Temperature STAC Workshop recommendation focused on development of a Marine Heatwave Alert Indicator that incorporates living resource considerations. These efforts include: reviewing current research on defining and quantifying marine heatwaves and identifying environmental thresholds of key fisheries species; meeting with experts to discuss their perspectives on defining marine heatwaves in the Chesapeake Bay and considerations for relating to fish impacts; and working with existing definitions to identify marine heatwaves in NOAA's buoy data for integration in seasonal summaries.

- 2:20 PM      Identifying environmental thresholds to predict suitable habitats for key species (Mary Fabrizio, VIMS) [30 Minutes]**  
Mary will be reviewing her research focused on understanding the environmental thresholds and habitat suitability of key fisheries species in the Chesapeake Bay. She will be highlighting her recently funded proposal to build habitat suitability models using physiological thresholds for several species of fishes and white shrimp.
- 2:50 PM      Incorporating Environmental Thresholds into Fishing Guidance (Tom Parham and Jim Uphoff, Maryland DNR) [30 Minutes]**  
Tom will be presenting his work focused on incorporating environmental thresholds for striped bass into fishing guidance. This research utilizes dissolved oxygen and water temperature data to characterize suitable habitat for striped bass.
- 3:20 PM      BREAK**
- 3:25 PM      Subsurface Structure and Impacts of Marine Heatwaves in the Chesapeake Bay (Nathan Shunk, VIMS) [30 Minutes]**  
Nathan will present his research investigating spatial and temporal patterns of marine heatwaves in the Chesapeake Bay and how they are connected to water quality parameters (e.g., dissolved oxygen).
- 3:55 PM      Discussion: Ideas for a Marine Heatwave Fisheries Alert Indicator [30 Minutes]**  
This discussion will focus on brainstorming how to include fish impact considerations when developing a marine heatwave-fisheries alert indicator.
- 4:25 PM      Partner Announcements and Wrap-up [5 Minutes]**
  - Funding Announcement: New [MARISA Small Grants Program](#) available. Focuses on using available decision support tools to integrate climate change information in hazard mitigation or climate adaptation plans.
- 4:30 PM      Adjourn**