

Approved by ARWG April 26

Adaptation & Resiliency Working Group Meeting

February 22, 2021 | 2:00p - 4:00p

Virtual Meeting Only

Chair: Secretary of Natural Resources, Jeannie Haddaway-Riccio

Coordinator: Allison Breitenother, allison.breitenother@maryland.gov

Attendees (Members): Secretary Haddaway-Riccio (DNR), Allison Breitenother (DNR), Katherine Charbonneau (DNR-CAC), Gregory Derwart (Insurance), Kyle Overly (MEMA), Sandy Hertz (MDOT), Bruce Michael (DNR), Jason Dubow (MDP), Matt Rowe (MDE), Susan Payne (MDA), Cliff Mitchell (MDH), Erik Meyers (The Conservation Fund), Catherine McCall (DNR), Megan Granato (DNR), Kevin Wagner (MDE), Christine Conn (DNR), Tim Lavallo (Commerce), Sasha Land (DNR)

Attendees (Non-members): Carrie Kennedy (DNR), Theresa Krugler (UVA-IEN), Dave Nemazie (UMCES), Ari Engelberg (DNR), Kristina Nell Weaver (UVA-IEN), Michael Sheffer (MDOT), Beth Groth (Charles County), Paola Ariza (MDOT), Jaleesa Tate (MEMA), Emily Vainieri (OAG-DNR), Joy Hatchette (Insurance), Treasurer Nancy Kopp (Treasurer's Office), Jennifer Raulin (DNR), Debbie Herr Cornwell (MDP), Nicole Carlozo (DNR), Jill Lemke (MDOT Port), Katie May Laumann (UMCES), Dave Guignet (MDE), Spyridon Papadimas (DGS), Jessica Shearer (MDOT-SHA), John Quinn (BGE), Annie Carew (UMCES), Jackie Specht (TNC), Nick Adams (UMD, MDH), Jim George (MDE), Hannah Brubach (CLA), Kim Drake (MDE), Kate Vogel (DNR), Brian Watts (Pew Charitable Trusts), Cindy Osorto (MDE), Heath Kelsey (UMCES), Laura Brush (C2ES), Zachary Rockwell (DHCD), Ty Mullen, Karen Metchis, Kevin Antoszewski (MDA), Kate McClure (UMD Sea Grant), Taryn Sudol (Sea Grant - CBSSC), Paul Berman (Interested Citizen), Alex DeWeese (DNR-CAC), Matt Fleming (DNR), Elliott Campbell (DNR), Nell Ziehl (MDP), James Wagner, Julie Reichert-Nguyen (NOAA), Erik Meyers (The Conservation Fund), Tom Walz (DHCD), Lynn Faulkner, Jesse Iliff, Megan Asbury (UVA-IEN), Susan Casey (MDE), Chris Beck (MDE), Charles Glass (MES), Kelly Leo (TNC), MCBP, Carrie Cook (DNR), Josh Foster (MDOT), . **Unidentified attendees by phone:** 410....19, 410....24, 631....80, 443....74, 410....23

Agenda

I. Welcome, Introductions & Review of Agenda

2:00 - 2:10

Secretary Haddaway-Riccio, will open the meeting, read roll call and seek approval of November 16 Meeting Minutes.

Materials: November 16 [Meeting Notes](#)

Notes:

- Announcements
 - US rejoined the Paris Climate Accord
 - Maryland's 2030 GGRA plan was published
- Roll call of members (everyone else via chat) - Secretary Haddaway-Riccio, Matt Rowe, Kyle Overly, Bruce Michael, Nicholas Adams for Cliff Mitchell, Jason Dubow, Sandy Hertz, Catherine McCall, Gregory Derwart
- Motion to approve meeting notes - motion from Matt Rowe, second from Jason Dubow, no opposition
- Review of agenda. Recommended priorities were drafted in the end of 2020 and incorporated into the 2020 MCCC Annual Report. We will discuss the scope and approach to make progress on the priorities over the next year.
- We will also discuss the work plan, but that conversation may happen in conjunction with the priority discussion.

II. 2021 Priority Discussion _____ 2:10 - 3:10

A discussion on the approach to, work on and implementation of the 2021 priorities. Membership will consider the following for each of the recommendations:

Materials: [2020 MCCC Annual Report](#), ARWG Priorities start on page 29

Notes:

- UMCES - Adaptation Indicators and Report Card (Coastal Adaptation Report Card): New data was provided today so the overall score has not yet been calculated. UMCES did significant stakeholder engagement and used feedback to identify four categories of indicators to assess adaptation: socioeconomic, ecosystem, hazard mitigation, and flooding. A color system is used to convey percent achievement of adaptation goals. Gray indicators have not yet been calculated. Example indicators include:
 - Community Rating System, which is part of the hazard mitigation category
 - Repetitive loss properties, which is in the socioeconomic category
 - Erosion rate, which is in the ecosystem category
 - Freeboard, which is part of the flooding category
 - Nuisance flood plans, which are part of the flooding category

The methods used to calculate scores for each of these indicators were reviewed. Overall, averaging all indicators, Maryland falls in the "yellow" (41-60% of goals achieved) range.

Question from Jason Dubow: Is there a separate document that explains all of the categories? Answer: Yes, and a draft will be issued shortly.



Question from Jason Dubow: Can you provide additional information about agricultural land preservation and population change? Answer: The agricultural land preservation indicator was included to reflect concern about agricultural-based livelihoods. Each county was evaluated against its land preservation goals. Population change is specific to the population living in flood hazard zones.

Question from Sandy Hertz: Does the socioeconomic category address repetitive loss and business disruptions through an EJ lens? Meaning... do we know whether specific demographics are being impacted more than others? Answer: Numbers come from NFIP, and include all loss properties in all counties. Data are then scaled based on the population of each county. This indicator scores poorly, as many repetitive loss properties are in areas in which people do not have the means to mitigate them.

Question from Ty Mullen: Is flooding considered in the inland counties? Flooding focuses on coastal but does incorporate whether a community has a NFP. They hope to have the opportunity to expand this in the future.

Question from Lynn Faulkner: Where is the concise list of indicators determined for this report? Question: Extensive stakeholder invites were issued and stakeholder mapping was performed. Their outreach included stakeholders from all coastal counties and many industries. They asked all stakeholders what the greatest climate change threat was to them. This feedback informed the creation of the indicators and indicator categories.

Question from Dave Nemazie: How easy would it be to downscale this type of reporting to help focus agencies in areas that have not been dealing with resiliency? Answer: Would take further commitment but it is the #1 recommendation to be identified in the report. Several counties requested that this assessment be done for them, and several said they will be using the assessment in upcoming hazard mitigation plans and funding applications.

Question from Karen Metchis: Does flooding include considerations of growth in impervious surface cover? Answer: Not now, but could be added in future iterations. For now, that is somewhat represented in the green infrastructure indicator

Question from Jackie Specht: Apologies if I missed this, but over what time frame are these scores being assessed? How are SLR projections being taken into account? Answer: Varies based on data source, several from 2020 data.

Comment from Jason Dubow: The only indicator that doesn't seem to fit with climate change impact is the agricultural land preservation one. Could there be some other type of measurement to assess the health of agriculture despite climate change impacts? Perhaps an economic indicator?



MENTIMETER:

**The meeting notes contain an accounting of questions and questions asked during the menti survey. A summary of the results from the survey accompanies the meeting notes on the [ARWG webpage](#) of the [MCCC site](#).*

- How do you envision the adaptation report card being used in Maryland? A lot of responses about tracking our progress (both at state level, like for the Adaptation Framework, and at a project level, if the report card is downscaled), funding decisions, targeting outreach, identifying gaps, etc.
- Who do you see as an end-user for the report card? Are there projects, organizations or individuals you work with that should be included in outreach? Many state agencies, local planners, legislators, bonding agencies, citizens groups, NGOs
- Any questions from the audience?
 - Is there a concern about downscaling the report card to the local level; do we have the appropriate data? Answer: We have county-level data and some community-scale data.
- UVA - Adaptation Framework: Sector and focus groups have all been meeting for 6-8 months and are employing consensus building techniques. Konveio was used as a collaboration tool for the Framework project members to review all of the content generated by December and provide reflection. The groups then took those comments and used the feedback to improve the draft materials. DNR and UVA are integrating all of the groups' materials into a more unified draft. In the future, this draft will be shared for review with participants and the larger ARWG membership. The draft table of contents was shared and reviewed.

MENTIMETER:

- How do you envision this Framework being utilized in Maryland? Guide state agencies, use as a foundation to develop programming, communicate to stakeholders, identify co-beneficial efforts, inform Scorecard indicators in the future, help ensure sustained action, etc.
- What component of the Framework can you see being most applicable to your work? Entire framework (9), goals (0), state level strategies (19), local level strategies (5), NGO level strategies (2), other (0), not directly applicable (0)
- What audiences (besides yourself or your agency) could benefit from the Framework? Local planners, sustainability officers, businesses to be impacted by sea level rise, outside partners, educators, other state governments, etc.
- Other questions?
 - Thoughts on different categories of metrics: progress, impacts, DEIJ focus, etc?



- DNR - Water Quality and Climate Change Resiliency Portfolio: Started assembling a portfolio last year in response to potential stimulus funds. We are building upon this to develop the framework to identify new projects through a resiliency opportunity zone assessment process. So far, work has focused on the DNR perspective and assets. Analysis should be completed by mid-March, which will generate a map of targeted areas for project development. The next step would be to then identify communities within these areas (2 this year) and provide technical assistance to them to develop the project portfolios with funding strategies. We are hoping for feedback on ways to select the communities through the Mentimeter.

Question from Jason Dubow: What are the types of projects being considered?

Answer: A variety of restoration projects to address both inland and coastal resilience, such as those that protect habitats, reduce flooding, increase infiltration, etc. So we are not being overly prescriptive but want to ensure the project type is appropriate for the location.

Question from Jim George: Could you speak to this effort as a model for other sectors, e.g., health, critical infrastructure? Answer: Other state agencies could use this approach, and we could review targeted areas across the agencies to identify areas of overlap. This would be helpful in terms of putting together federal funding proposals (BRIC), etc.

Question from Josh Foster: Are we using GIS categories/criteria for impacts or other characteristics that then can be added color-wise up to highlight and rank most vulnerable or critical locations? Answer: We are using GIS but currently focusing on flood hazards. Future iterations of this process would ideally include consideration of climate change impacts other than flooding (heat, etc).

Question from Hannah Brubach: Will this overlap with the current economic ROZs? Answer: This effort is separate from economic ROZs, but that targeting could be added as a data layer.

Question from Erik Meyers: Will size of protection/restoration opportunity via nature-based GI matter? Answer: There needs to be sufficient room/space to implement each specific project to realize the resilience benefits.

Question from Cindy Orsorto: How will socially vulnerable communities be identified? Answer: CDC Social Vulnerability Index, Park Equity Mapper and MDEJSCREEN, output from PALS project

MENTIMETER:

- Please rank the following selection criteria in order of importance
- Please identify additional selection criteria that should be considered:
Which communities are most vulnerable to climate change impacts,



community commitment to taking action on priorities, etc.

- MDP - Saltwater Intrusion Plan - MDP is evaluating the current status of research that relates to this subject matter. Meetings were held with researchers both within and outside of Maryland, specifically focusing on what is happening in the agricultural sector. MDP is also working with DNR on the development of coastal resilience easements. MDP is looking for guidance on how to make the plan most effective.

MENTIMETER:

- For coastal resilience easements effort within the SWIP, what particular actions or tasks do you feel need to happen to make this project successful? Funding source for plantings, work with individual property owners, consult with farmers, effective communication tools (website), etc.
- For the wetland adaptation plan component of the SWIP, what particular actions or tasks do you feel need to happen to make this project successful? Nationwide permits, input from property owners, uniformity in zoning, financing strategies, consistency across state agencies on priorities, connection to Bay goals, etc.
- DNR - Maryland Climate Leadership Academy: Successful transition to all online last year. Working with state agencies and the CoastSmart Council to develop topic-specific trainings.

MENTIMETER:

- What specialized training or resources would you like to see created? Stakeholder communication, integration with DGS Procurement Academy, training for elected officials, new federal climate initiatives, state level grants and technical assistance, social science on behavior change, vulnerability assessments, interdisciplinary training with diverse POVs, data management, stormwater management, MDE operational staff level, etc.
- What audiences should we target outreach to for MCLA offerings? MDOT TBUs, Maryland General Assembly, critical infrastructure managers, state agencies, school teachers, local boards and commissions, county climate officers, etc.
- Environmental and Climate Justice

MENTIMETER:

- What topics related to EJ and adaptation would like the workgroup to cover during meetings and include in our work plan? identification of



communities, EJ flaws in CBAs, impacts to tenant farmers, flood-prone areas in Baltimore City, planned retreat, rural communities, definitions/language, alignment with other goals, etc.

- How would you like the workgroup to approach this recommendation?
- Provide any suggestions about approach to, and integration of, EJ and climate adaptation for ARWG: interactive engagement, NGOs, invite communities, testimonials, use ECO as a model, etc.

III. 2021 Work plan Review

3:10 - 3:40

Informed by the above discussion, members will review the 2021 work plan and provide input and comments for integration. All comments (written and oral) due to Allison Breitenother by 12pm on Wednesday February 24

Materials: 2021 Work Plan

Notes: Work plan was sent via email. It was set up similarly to last year's version. All suggestions received today will be folded in. Otherwise, you can submit suggestions to Allison via email by Wednesday at noon.

IV. Public Comment, Updates, & Next Steps

3:40 - 4:00p

Updates

- CS-CRAB is available online at <https://mdfloodmaps.net/CRAB/>
- UMCES is holding the "Aligning Politics, Economics and Science relating to Climate Change" event Thursday evening. Registration is available here: https://zoom.us/webinar/register/WN_y6V9UYJPOGOZkmT29s-3Gw
- Kevin Wagner - Maryland Resiliency Partnership is organizing the state's first flood awareness month in April. Contact Kevin or Jen Sparenberg for more information.
- The GGRA Plan is available here: [https://mde.maryland.gov/programs/Air/ClimateChange/Pages/Greenhouse-Gas-Emissions-Reduction-Act-\(GGRA\)-Plan.aspx](https://mde.maryland.gov/programs/Air/ClimateChange/Pages/Greenhouse-Gas-Emissions-Reduction-Act-(GGRA)-Plan.aspx). A press release is available here: <https://news.maryland.gov/mde/2021/02/19/maryland-releases-bold-new-plan-to-achieve-climate-goals/>

Comments

- Paul Berman - Strong praise for report card effort. Remarkable effort showing vision and teamwork.

Motion to adjourn from Sandy Hertz, seconded by Jason Dubow, at 3:54 pm.

- **Next ARWG Meeting: April 26, 2021, 2-4pm.**
Email Allison.Breitenother@maryland.gov for meeting invitation.

