MARYLAND COMMISSION
on **CLIMATE CHANGE**

Ben Grumbles, Chair

Draft Meeting Notes - to be approved by workgroup Nov. 8, 2021

Adaptation & Resiliency Working Group Meeting
Sept 20, 2021 | 2:00p - 4:00p

<u>Virtual Meeting Only</u>

Chair: Secretary of Natural Resources, Jeannie Haddaway-Riccio
Coordinator: Allison Breitenother, allison.breitenother@maryland.gov

Attendees:
(Members)
Proxy for Delegate Dana Stein, Margie Brassil; Treasurer Nancy Kopp; Erik Meyers; Fredrika Moser; Proxy for Matthew Rowe, NAME; Anne Hairston-Strang; Kyle Overly; Proxy for Alisha Mulkey, Kevin Antoszewski; Tom Parham; Sandy Hertz; Catherine McCall; Wade Hearle; Alex Borkowski; Jason Dubow

(Non-members)
Paul Berman, Hannah Brubach, Annie Carew, Tim Lavalle, Thomas WAlz, Alex DeWeese , Allison Breitenother, Ari Engelberg, Bunky Luffman, Christine Conn, Elliott Campbell, Jenn Raulin, Kate Vogel, Kate Charbonneau, Kevin Coyne, Matt Fleming, Megan Granato, Nicole Carlozo, Josh Foster, Suhasini Ghosh, Peter Goodwin, John Kuriawa, Katie May Laumann, Kate McClure, Chris Beck, Cindy Osorto, Dave Guignet, Jim George, Kimberlee Drake, Mark Stewart, Rachel Lamb, Joy Hatchette, Jill Lemke, Deborah Herr Cornwell, ELizabeth Hughes, Nell Ziehl, Tassew Mekuria, Dave Nemazie, Robert Newton, Amy Pelsinky, Amanda Poskaitis, Katherine Rush, Jessica Shearer, Taryn Sudal, Martin, Ruth W., Beth Groth, Donna Buscemi, Scott Dance, Teri Rising

Agenda

I.   **Welcome, Introductions & Review of Agenda**   **2:00 - 2:10p**
      A. *Secretary Haddaway-Riccio (DNR),* will open the meeting, read roll call and seek approval of June 28 Meeting Minutes.

Secretary Haddaway-Riccio opened the meeting at 2:00pm. Allison Breitenother called roll, sufficient attendance for a quorum. Secretary Haddaway-Riccio sought a motion for approval of the June 28 meeting minutes. Jason Dubow motioned to approve, Wade Hearle seconded. No objections or abstainments, June 28 meeting minutes approved.

II.   **ARWG Priorities Topics**   **2:10 - 3:15p**
      A. Maryland Coastal Adaptation Indicators Report Card
          Katie May-Laumann from the University of Maryland Center for Environmental Science will provide an overview presentation of the final Maryland Coastal Adaptation Indicators Report Card ahead of its upcoming release.

Allison described that this presentation is a soft launch of the Maryland Coastal Adaptation Report Card, with a full release and publication of the report card in the coming months. Katie May-Laumann began to provide an overview of the Report Card.

Ecosystem Report Cards are effective to assess ecosystem condition, human circumstances, and adaptation progress by establishing a threshold to measure current and future effort against. The stakeholder driven process UMCES deployed was five steps: 1- Conceptualize, 2-Choose indicators, 3-Determine thresholds (based on stakeholder suggestions and scientific consensus), 4-Calculate grade, 5-Communicate. Definition of adaptation: "the process and actions taken to improve the ability of a community or ecosystem to respond to and withstand climate change impacts.

The draft Report Card includes 15 indicators across 4 categories (socioeconomic, ecosystem, planning and flooding). Ecosystem category includes indicators for: wetlands, forest, shoreline erosion and dredge material usage. Flooding category includes indicators for: critical facilities, community rating system, floodplain population and freeboard height. Planning category includes indicators for: nuisance flood plans, green infrastructure planning and flood mapping. The socioeconomic category includes indicators for: business disruption, loss coverage, preserved farmland, and repetitive loss properties. Katie May Laumann provided some details on the methodology of one indicator for each of the categories. Detailed methodology will be available from UMCES after the full public release of the Report Card. UMCES provided recommendations to improve the adaptation score and more Maryland forward on coastal adaptation. Those recommendations include: Equity: adaptation measures need to be more equitably apportioned, emphasis should be placed on structural adaptation, significant funding should be distributed to the categories with low scores, there needs to be an increased awareness of insurance availability and lastly, that there is a significant challenge associated with data availability which should be explored and addressed to improve assessment capabilities in the future. The Report Card also includes multiple stories that illustrate impacts of the climate impacts on the coastal zone in Maryland. One example, is Saltwater intrusion threatens vital habitats. Katie May Laumann provided a summary of the story from the Report Card which includes an explanation of saltwater intrusion and how it makes previously freshwater unusable and impacts forest health, resulting in ghost forests. There is difficulty in adaptation measure for saltwater intrusion. A second story, related to coastal change amplifying erosion problems, and the adaptation effort of living shorelines and natural buffers as an approach to reduce and prevent further erosion issues. While the Report Card is still draft, overall the assessment indicates that Maryland's coastal adaptation is in good shape but that there is room for improvement.

Questions. *Questions were asked by attendees via chat and audio. UMCES provided all of the answers (notes after the A:)*
1. What was the previous score? A: No previous score, this is the first assessment of it's kind in Maryland.
2. Was the term 'critical facilities' defined? A: Yes, they used the FEMA definition.
3. Land conservation indicator & land preservation indicator. The new analysis came out, and the agricultural preservation assessment shows achievement over 80%, would that be able to be reflected in this report card? A: UMCES will review and update as able.
4. Does the scorecard include room for error? i.e. wetland loss isn't always 100% accurately reported, does the score include correction for an underaccounting of loss? A: Specifics discussed in the methods document to be released in the future. There is consideration for error, knowing that the data are not completely accurate?
5. Are you trying to use the report card to highlight actions to improve conditions? In the critical facilities and repetitive loss categories, there may be great opportunities to reduce impervious and plant trees, such as with a buyout program. A: Yes, using the Report Card now to assess where we are, and hoping the scores will inform decision making in the future.

<ol type="a" start="1">
The two red categories are significantly impacted by impervious surfaces. How can we use the Report Card and score to make us more competitive for federal funding opportunities and link to green infrastructure.

<ol start="6">
Are categories weighted or did you consider weighting them? Considering the equity issues and data gaps you mentioned I'm wondering how that's captured in the total score. <u>A:</u> Some categories are weighted (like critical infrastructure). Most are not weighted because the indicators would not benefit from weighting. UMCES is aware of the equity issues, but the scores can be broken out into the individual counties to see where areas of concern are. Looking to develop more localized assessments.
Were individual counties scored as well? <u>A:</u> Individual counties were not scored. For socioeconomic, flooding and planning - most of the data is available by each county. However, an overall score for each county overall (whole reports card score), is not accounted for.
Is there a reverse report possible? What are the actions that most severely undercut resilience & adaptation? It seems there is potential to take good actions while also making very destructive or counterproductive actions? <u>A:</u> Is possible and something UMCES has discussed, how the actions to improve the score for one indicator may negatively impact another indicator. Needs to be thought systematically.
Does the Report Card take into account future projected adaptation needs, such as projected salt-water intrusion under seaside condos in Ocean City and other Maryland places, so that building collapses like the one in Surfside, Florida, can be avoided? <u>A:</u> This is the reason why there is the planning indicator. This indicator tries to capture the effort Maryland is sending towards meeting and exceeding the federal requirements to capture the risk. Indicators include consideration for future projections in planning category, but it could be stronger in other areas.

<ol type="A" start="2">
Harnessing Nature for Risk Reduction
Christine Conn and Nicole Carlozo from the Department of Natural Resources will provide an update on resilient coastal infrastructure efforts, where the Resiliency Through Restoration Projects are, and the status and next steps for the Resiliency Opportunity Zones (ROZ) effort.

Nicole Carlozo, manages DNR's Resiliency Through Restoration (RTR) Initiative. RTR was launched 5 years ago and is funded from the state's capital budget to utilize natural and nature based features to enhance community resilience to the impacts of climate change. Supports features like living shorelines, dune restoration, etc. Starting to look at more urban and inland flooding concerns and options to manage flooding concerns and increase resiliency. Long term and short term goals of the program are provided on the slides. Monitoring partners include: Chesapeake Bay National Estuarine Research Reserve (CBNEER) and University of Maryland Center for Environmental Science (UMCES). Piloting a Restoration Tracker through the MyCoast Application to improve data collection for monitoring efforts and understand the project progress. The RTR initiative is currently working on 19 projects (in one of three phases; design, permitting or construction), and hopes to have 3 projects started in the next month. This effort is funded through the [Grants Gateway](#) solicitations, specifically Outcome 3. Working to incorporate climate considerations into the review criteria for applications. Program Metrics (# of proposals, projects, partners, and funding) provided on slides. Working with MDE to utilize Tidal Wetland Compensation Funds to help support construction projects at a State Park. Project examples provided in slides: 1) West River Methodist Center (Anne Arundel County); 2) Deal Island

Peninsula Project (Somerset County). 3) Low Impact Development Center (Prince George's County). Next phase of the projects is Adaptive Management, "the act of monitoring and adjusting a restoration practice in the face of changing and dynamic conditions." DNR approaches this on a project by project basis, but also on a collective learning approach - what can they learn from the projects overall to apply to future projects. For any questions, please contact Nicole Carlozo (nicole.carlozo@maryland.gov).

Christine Conn, presents "The Comprehensive Water Quality and Climate Resiliency Portfolio." Targeted Resiliency Analysis (formally known as Resiliency Opportunity Zones), is being done to build a comprehensive water quality and climate resiliency portfolio. The Portfolio description and details are provided in the slides from Christine. This approach fits within Maryland's WIP strategy, GGRA plan and the ARWG strategy. Approach to building the portfolio includes two pathways: 1) Shovel Ready Project List and 2) Targeted Resiliency Areas. TRA: Phase I: Identify and select two TRA's, Phase II: Create the Portfolio, Phase III: Develop long term implementation and financing strategies (including Grants Gateway solicitations), then Refresh and Repeat - work with the next round of candidates and lessons learned to improve. The effort will include three assessment pillars (DNR Priority Areas, Climate Change Impact Areas and Opportunities for Natural and Nature Based Feature Projects). Details of examples and approaches can be found on the slides. Slides provide specifics of the data that inform the assessment pillars. The selection criteria will include the consideration of socially vulnerable communities as well as water quality restoration priorities (WIP) and tree planting priorities (GGRA). NExt steps - identify priority targeted resiliency areas by mid-fall 2021 and then procure technical services (for a 2 year contract). At this stage will ensure coordination with local governments and community groups within priority TRAs to gauge interest and identify specific projects for the portfolio. Strategic frameworks attrack investment - a good plan brings in good investment. TRAs is similar to the effort with GreenPrint Targeted Ecological Areas, which has seen a lot of success.

Questions:
1. When you consider the climate change impact zones are you incorporating flood incident data from counties, MDOT, or others? A: No, our approach for this analysis is to use existing analysis and data that is on hand. Would be able to pull in incident data when we get to tier 2 and have selected the areas of focus.
2. Would TRA or mapping categories help identify areas of stormwater / inland flooding where tree planting or other infiltration practices might be part of a watershed solution? Influential tree planting solution might be in a different area than the community. A: Point you to the green infrastructure assessment update, that CCS is funding currently. This is a more specific area than the focus area analysis, which is a broad landscape scale assessment. Elliot Campbell and Rachel Marks are doing the assessment, looking at resiliency co-benefits, green infrastructure, tree planting, etc. Analysis should be done in the next 18 months.
3. What is good enough / sufficient enough in terms of how many projects we need to do in Maryland in order to achieve our goals in resilience (green infrastructure or otherwise) and on what timeline do they need to be completed and with what funding level.

III.   2022 Recommendations and Workplan   3:15 - 3:45p
   A.   Membership will review and discuss 2022 draft recommendations and work plan.
Allison Breitenother walked through the process to complete the ARWG recommendations. The Commission has requested final recommendations by October 20, 2021. ARWG draft recommendations were sent out with the meeting agenda, and we are asking for comment by October 5. ARWG will then incorporate and submit final recommendations to MDE for

incorporation into the MCCC Annual Report. Allison Breitenother read the draft recommendations in their entirety. Request to state agency and other partners to review the Ongoing Activities and provide feedback and language revisions.

Suggested recommendation from Hannah Brubach (Chesapeake Legal Alliance): Address climate change in proposals for new, reissued, and revised State permits, licenses, and certifications. When drafting regulatory documents such as permits, Maryland natural resources, environmental, and agricultural regulators should acknowledge and respond to the projected impacts of climate change on the permitted activity, to the permittee, and in relation to other parties, communities, and public resources. State natural resources, environmental, and agricultural agencies should work with Commission members to review relevant provisions in significant permits, licenses, and certification in order to address these impacts of climate change.

Comment from Paul Berman (concerned citizen). Question about impact of saltwater intrusion on the buildings in coastal areas. The economics of individuals in high risk areas (retirees, fixed incomes), what are the equity implications. Request to have the saltwater intrusion recommendation to expand to include consideration of these issues and inclusive of the economics of and paying for the disasters, particularly related to saltwater intrusion impacts. Response: suggestion for that to be a separate recommendation, as the current recommendation is focused on wetland adaptation and programming. MIA would need to take the lead.

Comment from Fredrika Moser (Sea Grant, ARWG member). Recommendation #3 (EJ) should be a part of 1, 2 and 4. Include language to keep ARWG feet to the fire and include specific language for the specific communities to be contacted.

Comment from Chris Beck (MDE, Climate Program). Revise the language of the recommendations to be more specific, direct, and clear on who is doing what. Be clear about what the Governor or General Assembly would be able to do with the work.

IV.   Public Comment, Updates, & Next Steps   3:45 - 4:00p

Paul Berman - turned his camera to a tree in his backyard and thanked DNR for their offerings of seedlings 4+ years ago at a BPW meeting where he received it for free.

Secretary Haddaway-Riccio thanked participants and closed the meeting at 3:58pm.

- **Next ARWG Meeting: November 8, 2021, 2-4pm.**
   Email Allison.Breitenother@maryland.gov for a meeting invitation.