

**Adaptation & Resiliency Working Group**  
**Q4 2019 Meeting Agenda + Notes**

**Date/Time:** Monday, November 18, 2019; **2:00-4:00 PM**

**Location:** Maryland Department of Natural Resources  
580 Taylor Avenue, Annapolis, MD 21401  
<sup>1</sup>Conference Room C-1

Conference Line: +1-347-450-4997  
Pin: 953-376-046#

**Chair:** Secretary of Natural Resources, Jeannie Haddaway-Riccio  
**Coordinator:** Allison Breitenother

**Meeting Objective:** The fourth quarter meeting will provide an opportunity for the ARWG to hear progress updates on several 2019 Work Plan topics, including plans to address saltwater intrusion and nuisance flooding, as well as opportunities to build climate change resilience through environmental compliance programs. The Chesapeake Bay Trust will solicit expertise and feedback from ARWG regarding the development of their 5 year strategic plan and how best to incorporate climate change considerations. The meeting will include a review and discussion around the 2019 Annual Report recommendations, and two 2020 Work Plan topics: the development of adaptation indicators with UMCES and the Adaptation 2030 strategy scoping

Attendance: Allison Breitenother (DNR), Bill Neville (Ocean City), Catherine McCall (DNR), Charles Glass (MDOT), Dave Guignet (MDE), Dave Nemazie (UMCES / STWG), , Debbie Herr Cornwell (MDP), Elizabeth Habic (MDOT), Elliott Campbell (DNR), Emily Vanieri (OAG), Gary Setzer (MDE), Hannah Bruback (Chesapeake Legal Alliance), Harry Hunsicker (MDE-WSACP), Secretary Jeannie Haddaway-Riccio (DNR), Jim George (MDE WSA), Joe Abe (DNR/Coast Smart), Joe Brenner (KCI), Kacey Wetzel (CBT), Karuna Pujara (MDOT-SHA), Katherine Charbonneau (CAC), Kevin Wagner (MDE), Kristen Fleming (DNR), Kristen Forti (MEMA), Lisa Waigner (UMCES), Margaret Oliver (St. Mary's County DPWT), Margie Brassil (Del. Dana Stein Office), Matt Fleming (DNR), Matt Rowe (MDE), Megan Granato (DNR), Mike Sheffer (MDOT-SHA), Nancy Servatius (MDH0, Nell Ziehl (MDP- MD Historical Trust), Nicole Carlozo (DNR), Sandy Hertz (MDOT), Susan Payne (MDA)  
Phone: David Flores (Center for Progressive Reform), Lynn ? (?), Marcy Jones (Montgomery County Climate Science Team), Spyros Papadimas (DGS)

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**I. Welcome, Introductions & Review of Agenda** **2:00 - 2:10 pm**  
*Secretary Haddaway-Ricco, DNR*

Decision: Seek approval of August 5, 2019 meeting notes.

Materials: Q4 2019 Meeting Agenda  
[August 8, 2019 Draft Meeting Notes](#)  
[2019 ARWG Work Plan](#)

Allison called the meeting to order at 2:05pm and asked for a round of introductions. Secretary Haddaway-Ricco asked for approval of 08/05/19 meeting notes (approved unanimously).

## II. 2019 Work Plan and State Agency Updates

2:10 - 2:50pm

*Matt Fleming, DNR, update on Climate Academy*

*Catherine McCall, DNR, update on Nuisance Flood Plan guidance and mapping workgroup update*

*Debbie Herr Cornwell, MDP, update on Saltwater Intrusion Plan*

*Susan Payne, MDA, update on identifying resources to support land-based practices for mitigation, adaptation and resiliency*

*Allison Breitenother, DNR - update on the development of adaptation indicators*

**Discussion:** ARWG members will hear updates on relevant 2019 Work Plan activities in addition to agency updates that inform climate adaptation efforts across the state. The Q4 meeting will provide members an opportunity to hear a status update, ask questions and discuss next steps.

**Materials:** Nuisance Flood Plan Guidance

Matt Fleming presented on the Climate Leadership Academy. Cohorts 4 and 5 are wrapping up at Johns Hopkins and in Charles County Maryland. More than 400 individuals have completed the Academy; around 40 who are working toward the CCP credential. Charles County received a AAA bond rating, partially credited to their staff having gone through the Climate Leadership Academy.

Catherine McCall presented update on Nuisance Flood Plan Guidance. Guidance issued jointly by DNR and MDP on October 1, 2019. Guidance is available online (<https://dnr.maryland.gov/ccs/Documents/NuisanceFloodPlan.pdf>). Applies to communities affected by tidal coastal flood, which includes 16 counties in Maryland's coastal zone and the municipalities within. MDP and DNR will be holding technical assistance sessions in December to assist local governments develop nuisance flood plans required by law. All sessions will be 10:30am-12:30pm and include the same information.

- Session 1: December 10 – Eastern Shore Higher Education Center, Chesapeake College, HEC 201: Wye Mills, MD
- Session 2: December 11 – Marshy Hope Nature Center, Auditorium, 7130 Marshy Point Rd, Baltimore, MD
- Session 3: December 12 – Tri-County Council for the Lower Eastern Shore, 31901 Tri-County Way, Salisbury, MD
- Session 4: December 19 – Calvert Library Prince Frederick, Room 1&2, 850 Costley Way, Prince Frederick, MD

Debbie Herr Cornwell presented on the Saltwater Intrusion Plan. MDP established and led state agency work group that included DNR, MDP, MDE, MD Sea Grant, and Harry Hughes Center for Agroecology. In 2018 and 2019 MDP conducted research and interviews and developed the Plan based on feedback from the work group and several other experts. The Plan was vetted with stakeholder groups and sister agencies. Draft went to Governor's office today, on 11/18/19. MDP on schedule to submit to GAM by December 15, 2019. Plan to update the plan in five years (2024). Final plan will be distributed to the ARWG.

Susan Payne presented on identifying resources to support land-based practices for mitigation, adaptation and resiliency. One thing MDA is doing is looking at existing programs to identify ways to tweak what already doing but how can deliver services better through the Soil Conservation Districts. MDA, DNR, and MDE sit on the Natural and Working Lands Work Group of the National Climate Alliance - submitted 3 grant proposals and all 3 were funded. Elliott Campbell explained the projects: 1) partnership led by Duke University in partnership with NC, VA, DE, and NJ to run a model on blue carbon storage and sequestration potential in those states; 2) combining satellite imagery with high-resolution LiDAR to map forests; 3) model different scenarios of forest management. Soil Health Advisory Committee meeting December 2nd at 9:30am at MDA; all ARWG members are welcome to join - contact Susan Payne for more information.

Dave Guignet has been leading a Coast Smart Council initiative to develop a "100 year + 3 feet" data layer that goes "up and out" - anticipate developing a white paper for how the CSC did the process. Hopefully white paper and layer will be available in January 2020.

Allison Breitenother presented on the Adaptation Indicators project, which is moving along with UMCES. Will be 3 phase over 9-12 months: Phase 1 is identifying which adaptation indicators are already out there; Phase 2 is engagement with non-ARWG partners (send names of groups/agencies/individuals to Allison); Phase 3 will include the formal development of the scorecard; ARWG feedback will be incorporated. Anticipate an update on this project during February 2020 meeting.

**Approved February 10, 2020.**

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### III. Workgroup Member Presentations

2:45 – 3:15 pm

1. *Harry Hunsicker, MDE. Climate Change Management Through Environmental Compliance*

Discussion: MDE will provide an update on the 2019 Work Plan activities focused on climate change management through environmental compliance.

Materials: Presentation, Climate Change Management Through Environmental Compliance

2. *Kacey Wetzel, CBT. Climate considerations for the Trusts' 5 year Strategic Plan*

Discussion: Chesapeake Bay Trust will solicit feedback from ARWG members on potential avenues for integration of climate considerations into the development of their next 5 year strategic plan.

Materials: Presentation, Climate considerations for the Chesapeake Bay Trust

**Harry Hunsicker** (MDE) Program Manager for Environmental Compliance Program. Participated in the Climate Leadership Academy cohort 2; inspired him to think about how they are addressing climate change within his program. Responsible for 9 million acres of wetlands permitting. Previously climate was not a part of their strategic planning. Goal for today is to hear ARWG thoughts on how MDE's Environmental Compliance Program.

Recommends a 3-prong approach: TRAINING | TARGETING | TOOLS

Many of his staff don't have basic climate competency, so difficult to encourage them to consider climate without a basic understanding of how climate could impact their work. Looking at tools (e.g. spatial) that help prioritize. How can we integrate climate into outreach, inspections, audits? Perhaps a flyer? We have a ton of data, but limited analysis tools. Are there new data that we should be pulling in (e.g. environmental justice)?

Sandy Hertz: would be helpful to put together resilient practices that we want to see / that we want local jurisdictions to implement - those considerations should be part of the permit review process.

Matt Fleming: DNR Chesapeake & Coastal Service can assist with tool development and data processing. Also, with training, through the Climate Leadership Academy there is opportunity to train specific sectors; just need to go for grants to put on a course. Finally, how do we built adaptive management into restoration design? Projects are designed to adjust according to their surroundings, so adaptive management (and adaptive permitting requirements) are necessary in order to implement these sorts of natural and nature-based feature products.

Lisa Waigner: NOAA is developing fisheries analysis tools similar to what Harry is describing; worth a follow-up conversation.

Jim George: Water Resources Registry may be a helpful resource. Challenge though is still need for analytics.

Richard Crenshaw: Rule he used to follow is "don't bring the data in, process it in the field" so maybe that would be more helpful?

**If interested in more, contact Harry Hunsicker at [harry.hunsicker@maryland.gov](mailto:harry.hunsicker@maryland.gov)**

**Kasey Wetzel**, Director of Outreach and Education at the Chesapeake Bay Trust. Governed by a 19-person Board (Matt Fleming is a Board member) and runs like a family foundation model. Trust's mission is to increase stewardship of the Chesapeake Bay and it's resources. Going through a strategic planning process right now; climate change is a priority. Working now to identify what CBT can do to incorporate climate change into their portfolio. First focus area is education programs and working with partners to ensure climate change is integrating into curriculums. Second focus area is restoration and achieving water quality goals. Third focus area is capacity-building and behavior change. Here today to ensure whatever CBT does in the climate change space is additive.

Jim George: CBT does a lot of work in the social marketing and behavior change area, can you speak to intersection of living shorelines, climate change, and the use of oysters in designs.

Megan Granato: Because CBT works with so many different partners, interesting to Megan that two big efforts she's been tracking have gone through CBT, so CBT had opportunity to connect the projects, look across programs, and ensure the two investments were going to be complementary to each other. Perhaps this is a critical role that CBT can and should continue to provide value-add in the climate space.

Megan Granato: climate impacts will hit underserved communities hardest, first, so wondering how CBT is addressing vulnerabilities and inequities moving forward? Kasey: likely strategy to remain on the table is working with marginal communities.

Matt Rowe: keep working on the environmental literacy work. Also consider urban heat island effects on disadvantaged communities. Policy/decision makers often don't have time to comb through all the reports and data to determine the best move forward, so synthesis of research and information is also a helpful value-add.

Dr. Peter Goodwin: CBT is unique in that they have flexible funds to fill many gaps; outreach CBT is doing to inform the strategic plan is critical and appreciated.

**Please send additional thoughts/comments to Kasey Wetzel at [wetzel@cbtrust.org](mailto:wetzel@cbtrust.org).**

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#### **IV. Annual Report Recommendations**

**3:15 - 3:40 pm**

*Allison Breitenother and Catherine McCall, DNR*

*Annual Report Recommendations & MCCC Commission meeting debrief with focus on recommendation regarding next phase of adaptation planning.*

**Background:** Since the 2007 Executive Order was signed establishing the MCCC, Maryland has been a national leader in advancing climate adaptation. The ARWG developed Phase I and II adaptation strategies in 2008 and 2011 for advancing resilience across sectors. After a decade of strategy implementation and as we learn more about how risks are evolving and ways to build adaptation, the ARWG is discussing evaluation of progress and definition of future steps and opportunities.

**Discussion:** Members will hear updates and discuss the 2019 Annual Report Recommendations, and a debrief from the MCCC Full Commission meetings. Discussion will follow around the next phase of adaptation planning.

During their November 6th meeting the MCCC voted on and approved on 2019 Annual Report Recommendations. Feedback from the MCCC were positive; ARWG was praised for actionable recommendations.

Recommendation 1: Develop and adopt indicators to track progress. Will begin in January 2020.

Recommendation 2: Evaluate and update the adaptation strategy. Scoping will state in 2020.

Recommendation 3: Advance Saltwater Intrusion Plan recommendations.

Recommendation 4: Review nuisance flood plans from local jurisdictions. ARWG agreed to be available for the review of the nuisance flood plans (no "approval" authority, but ARWG should anticipate being tapped as technical experts).

Recommendation 5: Maryland's Climate Leadership Academy.

Recommendation 6: Water Quality and Climate Change Resiliency Portfolio. This one doesn't have a lead (working to figure that out right now). MDOT (Sandy Hertz) may have good capacity to lead this.

**Approved February 10, 2020.**

Matt Rowe: the climate space is getting busy; the degree that we can consolidate materials and efforts into a single place would be very helpful (do we have authority to develop and host consolidated materials?)

Elizabeth Habic: Something like CalAdapt clearinghouse would be helpful.

Jim George: are there concerns about water resources? Debbie Herr Cornwell: MDP did a review of Comp Plans to determine whether climate was being acknowledged and very little did, but Comp Plans that have been updated in the last few years are starting to address climate change.

Catherine McCall provided an update on recommendation #2. Reminder that after the August 8th meeting folks were asked to sign-up via a Google Form to engage on small committees to advance the 8 thematic areas. Leads or co-leads have been identified for almost all of them. Worked through the fall to identify funding to hire an outside facilitator. Anticipate starting early 2020 to initiate the 8 groups. Look for emails over the next few weeks about who volunteered for each group and what the potential schedule in 2020 may look like.

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## **V. Updates, Meeting Recap & Next Steps**

**3:45 - 4:00 pm**

### *2020 Meeting Schedule*

#### *Upcoming Dates:*

2020 ARWG meetings at DNR. *All meetings will take place from 2p - 4p.*

Q1: February 10 \*\* Note, this meeting was moved from February 3 to February 10.

Q2: May 11

Q3: August 3

Q4: November 9

Nicole Carlozo provided update on resiliency efforts at DNR and CBP Resiliency Work Group. DNR leads the Resiliency through Restoration Initiative that supports local governments for design and implementation of projects that enhance natural and nature-based features. FY20 funding 17 projects in urban, tidal, and non-tidal areas. Hoping for construction early next year and tours of projects in fall 2020. Also working with CBNERR on developing long-term monitoring protocol which will also help with their communications and outreach materials.

CBP Resiliency Work Group will be developing indicators for entire bay watershed; Nicole and Allison are working to ensure there is alignment between what is happening on that watershed-wide project and the ARWG's indicator's project.

Wave attenuation project - will be modeling protective benefits of marshes. One of the first tasks is to select the sea level rise scenarios to use in that project (likely Jan-Apr meetings). ARWG is welcome to participate.

Contact Nicole Carlozo at [nicole.carlozo@maryland.gov](mailto:nicole.carlozo@maryland.gov) for more information on any of the above.

### **2020 Meetings: Q1 February 10 | Q2 May 11 | Q3 August 3 | Q4 November 9 from 2:00-4:00 PM at DNR**

Coast Smart Council will be starting meetings earlier, so now 30 minute break between those and ARWG meetings.

Sought ARWG feedback on implementing 2 additional working meetings between the quarterly meetings. Matt Rowe said that would be helpful to push things forward more quickly. Susan Payne requested that we look at the schedules of other work groups and committee that members participate in to avoid conflicts.

#### *Updates:*

Nell Zeill (MHT) hoping to release planning guidance & trainings by end of 2019 for local governments that are currently being inundated or projected to be inundated by flooding. Will be circulated to the ARWG once final. Jim George: heard MDP/MHT is developing a climate adaptation strategy. Nell: focus has been to assist local governments in their planning of impacts to historical resources. Focus has been on flooding. Maryland is the first state in the country to do this, so are open to feedback.

**Approved February 10, 2020.**

Matt Rowe (MDE): UMD water sustainability forum on November 22 will be revisiting work to see what's been accomplished and what could be a focus for the future with regard to water sustainability.

Susan Payne (MDA): saltwater intrusion awareness symposium being hosted Friday November 22 in Annapolis. Jason Dubow and Kate Tully will be speaking.

Commission will be finalizing their annual report, and it will be distributed to the group.

**ITEMS FOR INPUT, SEND TO ALLISON:**

- 1. What indicators are out there; what indicators does Maryland need?**
- 2. What stakeholders are critical in the development of indicators?**
- 3. Further thoughts on environmental compliance**
- 4. Further thoughts on CBT strategic planning by the end of January**

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