



## **Climate Resiliency Workgroup (CRWG)**

Thursday, March 20th, 2025

1:30 – 3:30 PM

### **MEETING MATERIALS [LINK](#)**

### **ACTION ITEMS**

- Draft documentation capturing ideas on outcome language from workgroup based on direction provided by Management Board after outcome dispositions are determined- Management board final outcome disposition decisions will be on April 10th (Julie, Julia, Breck, Mark)
- Major group takeaways (different ideas from the groups):
  - Language discussion
    - Group 1: Identify and implement nature-based adaptation options with partners that enhances resilience of ecosystems, communities, and economies across tidal and non-tidal portions of the watershed
    - Group 2: Facilitate implementation of nature based restoration and protection projects to enhance the long term resiliency of the bay watershed from the impacts of the hydrologic and temperature changes
  - SMART outputs
    - Group 1: Work with jurisdictions to identify their resilience priorities for the area. Technical assistance to support grant proposals. Partnership building, guidance, knowledge sharing. Resilience success metrics.
    - Group 2: focus on what is measurable, not an endpoint. For example, how many funding opportunities have resilience as a criteria- ex. 75% have it. Count what is happening within the Bay Program, not what is on the ground or what others are doing; group metrics across the Bay program
  - EC and resilience assessment structure framework
    - Support for joint meetings that include strategies with options on how to get the work done.

### **MINUTES**

**1:30 – 1:35 PM Welcome – Mark Bennett, Chair (USGS) and Julie Reichert-Nguyen, Coordinator (NOAA)**

#### Meeting Focus:

*Share input from the Management Board on the Monitoring and Assessment and Adaptation outcome assessments and develop ideas for recommended outcome language for Beyond 2025.*

### Workgroup Announcements:

- The University of Michigan SEAS Masters Student marsh adaptation project is moving forward. They are developing their scope of work with Envision the Choptank partners to help them develop a coastal wetland resilience plan for the Choptank River complex and perform relevant GIS analyses to assess marsh adaptation options. Points of Contact: Julie Reichert-Nguyen (NOAA)
- The marine heatwave analysis with NOAA buoy and satellite data is moving forward. We are looking to have the 2023 analysis completed by early April 2025. Points of Contact: Julia Fucci (CRC) and Julie Reichert-Nguyen (NOAA).
- Old Dominion University and Tetra Tech's proposal, "Evaluating the performance of nature-based coastal protection solutions for natural capital accounting in Chesapeake Bay," has been selected for the STAC Synthesis funding. Points of Contact: Laura Costadone (ODU) and Vamsi Sridharan (Tetra Tech).

### **1:35 – 2:00 PM Review Feedback from the Management Board on Outcome Assessments**

**Presenter:** Mark Bennett, Molly Mitchell (VIMS), and Julie Reichert-Nguyen

Description: Share Management Board feedback on the Adaptation outcome and the Monitoring and Assessment Outcome

#### Materials:

- Monitoring and Assessment [document](#) and presentation
- Adaptation outcome [document](#) and presentation

### **Discussion:**

- Monitoring and assessment
  - This outcome is looking at replace (still an outcome, but different focus) or reclassify (no longer an outcome and is instead integrated in the program as something else); Management Board leaning towards reclassify. Need to sort out how we can develop a framework to ensure science integration of environmental change is incorporated into other outcomes?
- Adaptation
  - The metrics of this outcome were of question, and questions on what was meant by place-based. How do we implement place-based management while also tracking things that are already happening?
  - Language change from climate to 'environmental change'
- Natalie Snider (chat): Environmental change does not acknowledge social change that comes with climate, perhaps we say bay change? It would expand our goal

beyond environmental science; Julie stated that they can include this on a list of name options.

- Kelly Maloney (chat): Would invasive species be considered a task or output under environmental change? How broad will this group be covering?;
- Mark Response- We want to be careful broadening, we will have to define which types of environmental change we are covering
- Molly: Also to consider, we are talking about not just change, but long term change, which is different from the change that other workgroups are covering
- Julie: Important that we consider where we can add value to other workgroups resiliency work?

## **2:00 – 2:40 PM Breakout Rooms: Develop Outcome Language Recommendations**

**Facilitators:** Julie Reichert-Nguyen and Mark Bennett

*Description: Julie will outline the breakout room expectations and goals. Breakout rooms will be ~40 minutes, and there will be a notetaker to document ideas from the group. Groups will discuss outcome direction, language and generate ideas for SMART outputs.*

*Materials:*

- *Adaptation Notes Slides*

### **Discussion:**

- See notes in breakout [group 1](#) and [group 2](#) slides

## **2:40-3:00 Outcome Language Ideas**

- *Share outcome language ideas from the breakout groups with the whole group for input.*

### **Discussion**

- Break out group 1
  - Language discussion
    - Don't put an exact number of how many areas- not sure of time length needed to work with partners for the adaptation progress
    - Define temp, what is meant by it (e.g., extremes); also precipitation is important to consider: increases/flooding and drought
    - Nicole Carlozo (chat): Two comments: 1) If we are going to be specific on environmental conditions, I would include temp, precip, and SLR. 2) There is an opportunity to incorporate adaptive management as an implementation action (which would connect this to the science integration/monitoring outcome)

- Opportunity to incorporate adaptive management as an implementation action which would connect it to science integration direction of monitoring and assessment outcome
- Note: adaptive management has an existing use in the CBP Strategic Review System (SRS) process - use of the word could cause confusion (leave out of outcome language)
- Nicole Carlozo (chat): Here is the definition I use [for adaptive management: The act of monitoring and adjusting a restoration practice in the face of new science and changing/dynamic conditions. This “learn by doing” approach allows practitioners to incorporate new scientific information into the implementation and maintenance of a restoration project. Adaptive management promotes flexible decision-making to modify existing activities or create new activities if new circumstances arise or if projects are not meeting their goals. This practice is encouraged on all innovative projects. This would also include conservation and restoration practices that incorporate resilience (ex: easements with marsh migration buffers)
- In considering the inclusion of tidal and nontidal, identify areas where nontidal resilience activities will benefit tidal areas and vice versa; for states without tidal Chesapeake Bay waters, focus on nontidal areas that are part of the Bay watershed
- SMART outputs
  - Identify where to focus adaptation and scale; work with jurisdictions to identify their resilience priorities for the area; identify how CRWG can add value in these areas for adaptation
  - Technical assistance to support grant proposals
  - Permitting needed, navigating permitting process
  - Nicole Carlozo (chat): Implementation is going to be locally driven. What can we do at the Workgroup level? Partnership building, guidance, knowledge sharing, etc.
  - Develop resilience success metrics
  - Identify adaptation strategies across jurisdictions - local laws and ordinances, land tools
  - Consider not limiting to nature-based edge of field practices; also think of soil health and drainage/water storage
- Break out group 2
  - Language discussion
    - Taryn Sudol (chat): I think it is important to say how we’re distinct from the wetlands group to avoid confusion. I also agree about

encompassing ecosystems beyond wetlands. Potentially our 'places' target a variety of ecosystems vulnerable to flood and temp

- Julia: The group recommended earlier to say 'watershed' to capture both tidal and nontidal
- Seam Emmons (chat): I agree with what we said about integrating tidal and non-tidal. One common theme among them could be to examine changes in extremes (flooding, temp, etc) to link to the change theme
- Taylor Woods (chat): What are the stressors/interests related to changing environments from partners in portions of the watershed with less tidal habitat?
- Natalie Snider (chat): Tidal and non-tidal has a lot of overlap
- Our work as conveners is important
- Molly's rewording of language: "Facilitate implementation restoration and protection projects to enhance the long term resiliency of the Bay from the impacts of hydrologic and temperature changes"
  - Incorporate nature based solutions
  - Remove jurisdiction wording out of the outcome language and put it into the measurable output - maybe this is more measurable over time
  - New Language: "Facilitate implementation of nature-based restoration and protection projects to enhance the long term resiliency of the Bay from the impacts of hydrologic and temperature changes"
- SMART outputs
  - Natalie Snider: All jurisdictions are giving our money to do projects - is there a layer of resilience within these projects? That is where my head is in regards to SMART. Ask jurisdictions to self report on that? Or pick a target area and track progress in that focus area?
  - Katie Vogel: Through grants gateway DNR started requiring all projects submitted need to incorporate MD guidance to using the 2023 sea level rise projections- check list. MyCoast is a good example in that it is both tidal and nontidal. Chesapeake Bay region- what would that facilitation to increase capacity for nature based solutions look like? Number of people engaged or the number of projects funded by the state.

- It could be guidance (like in a workshop) on how to incorporate this kind of thinking into projects that could serve as a forum to expand the use of these ideas.
- Mark Bennett: Other outcomes have very specific end goals (x amount of acres) - this is ongoing, difficult to have an endpoint. Not sure if changing the language is going to fit that. Maybe we focus on making things measurable and not worry about the endpoint.
- Molly Mitchell : We want something we can measure that doesn't require an additional measuring metric, that outcomes can incorporate thinking within to/change their awareness of resilience and other climate issues
- Natalie Snider: Near term measure example: 75 % of projects within Bay program have a lens of resilience in them
- Molly Mitchell : Count what is happening within the bay program - all the groups work to track 'change', we are focused on long term change, and how change is being implemented
- Molly Mitchell : Capture funding and other groups metrics across the bay program

### **3:00-3:25 Discussion: Incorporation of an environmental change and resilience assessment framework**

- *What would the framework process entail to allow for environmental change science integration across outcomes in the Chesapeake Bay Watershed Agreement?*

#### **Discussion**

- Nicole Carlozo: I would advocate for joint meetings with the GITS instead of sending our people and experts to other GIT/workgroup meetings
- Ben McFarlane: wouldn't be opposed to volunteering to go to other meetings, not sure what topic he could help with; would be topic dependant; Taryn in agreement
- Joe Galarraga: agrees with Nicole, better use of capacity
- Nicole Carlozo: When workgroup first formed, we had some workshops with specific GITs but then they were left to implement the strategies identified
  - Julie Reichert-Nguyen: The challenge is that there weren't resources or expertise available to implement strategies
  - Mark Bennett: We would need to also identify resources to follow through with the identified strategies

- Issues with having a dedicated team: how to staff, funding for staff; too many subjects to prioritize; we can't do this work for all the outcomes, we would need to prioritize. Also, hard to identify just 2 or 3 people with enough knowledge to support all outcomes
- Group support for joint meetings, where the CRWG holds a meeting jointly with another workgroup to discuss resilience/environmental change within their outcome, provide guidance, and provide steps forward

### 3:25-3:30 Member Announcements and Wrap up

**Next Meeting: April 17, 2025**

#### Attendance:

Name	Affiliation	Name	Affiliation
Adrienne Kotula	CBC	Joel Carr	USGS
Allison Welch	CRC	Jim George	MDE
Arianna Johns	VA DEQ	Joe Galarraga	TNC
Ben McFarlane	HRPDC	Julia Fucci	CRC
Breck Sullivan	USGS	Julie Reichert-Nguyen	NOAA
Cassie Davis,	NYS DEC	Kate Vogel	NWF
Christina Garvey	CRC	Kelly Maloney	USGS
		Ken Hyer	USGS
Christine Kirchhoff	STAC-PSU	Mark Bennett	USGS
Debbie Herr Cornwell	MDP	Mary Bennett	VA DOF
Ellen Egen		George Doumit	DNREC
George Doumit	DNREC	Matt Konfirst	EPA
Natalie Snider	MD DNR	Meg Cole	STAC-CRC

Nicole Carlozo	MD DNR	Michael C Maddox	UMD
Sean Emmons	USGS	Molly Mitchell	VIMS
Taryn A Sudol	MD Sea Grant	Nadya Chehab	MDA
Taylor R. Condon	EPA RTP	Taylor Woods	USGS