Joint Wetland Workgroup and Climate Resiliency Workgroup Meeting

December 13-14, 2021

December 13th 1:30 – 4:00 pm | December 14th 2 – 4:30 pm

DAY 1 (Dec 13th):
1:30 pm – 4:00 pm
Webex Link - Day 1
Meeting number: 620 194 8634
Password: byMiJEme635
OR
Join by phone: +1-408-418-9388
Access code: 620 194 8634

DAY 2 (Dec 14th):
2 pm –4:30 pm
Webex Link - Day 2
Meeting number: 2623 420 7136
Password: 121421
OR
Join by phone: +1-408-418-9388
Access Code: 2623 420 7136

Day 1 Meeting Materials
Day 2 Meeting Materials

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

Two-Day Cross-Workgroup Meeting Goals

- Exchange information on living shoreline projects involving threshold setting, targeting criteria, and social behavior.
- Discuss projects in the context of potential application to assist with assessing shoreline vulnerability, resilience, and promoting restoration action.

Monday, December 13th

1:30 pm **Welcome and Introductions**
Mark Bennett (USGS), Climate Resiliency Workgroup Chair
Julie Reichert-Nguyen (NOAA), Climate Resiliency Workgroup Coordinator

1:40 pm **Increasing use of Living shorelines and natural and nature-based features to build coastal resilience**

Pam Mason (VIMS), Wetland Workgroup Co-chair

Community resilience to storm-driven coastal flooding is improved with the presence of natural and nature-based features (NNBFs) such as living shorelines, wetlands, wooded areas, and beaches. They can provide multiple benefits for a local community, including mitigating the impacts of storm surge and sea-level rise and allowing communities to take advantage of programmatic incentive programs like FEMA's Community Rating System and nutrient reduction crediting. CCRM/ VIMS has developed a geospatial protocol and NNBF ranking methodology with the goal of incentivizing the protection and creation of NNBFs by highlighting the multiple benefits these features can provide, identifying target areas where new or restored NNBFs would benefit buildings, including critical infrastructure, that lack in benefits from existing NNBFs.

2:10 pm **Communications and Guidance on Shoreline Protection Options for Coastal Landowners**

Gina Hunt (MD DNR)

This is a behavior-based approach (community-based social marketing) to increase the adoption of living shorelines or keep existing shorelines natural, among property owners along the Chesapeake Bay and its tributaries. The research results of a previous study to identify adoption barriers were used to design outreach strategies and materials to encourage shoreline property owners to keep a natural shoreline or install a living shoreline. The outreach materials were created to educate property owners as well as assist organizations with planning and implementing outreach. The project will be complete next month and include toolkits for each jurisdiction. The presentation will provide an overview of the implementation plan for the outreach materials.

2:40 pm **Mapping percentage of hardened shoreline in MD and VA**

Justin Shapiro (CRC), Fisheries GIT Staffer

Building off results from a GIT-funded study establishing a connection between shoreline hardening and living resources decline, the Fish Habitat Action Team, in conjunction with the Bay Program's GIS team, created mapping layers highlighting hardened shoreline percentages for Virginia and parts of Maryland. These layers utilize inventory data obtained from VIMS. With mapping products in hand, the Forage and Fish Habitat Action Teams are looking for opportunities to present these results to a local planning audience and also hope to explore avenues for potential indicator development.

3:10 pm **Discussion**

- *How can the information from these projects assist with forecasting vulnerability and informing climate resilience decision-making for restoration activities?*
- *What opportunities are there to build this information into a resilience indicator? What would that indicator look like?*
- *Are there any science needs from what we heard today that we should include in the STAR science needs database?*

3:45 pm **Announcements**

- **Draft of Federal Commitment to the Chesapeake Executive Council Directive NO. 21-1 Collective Action for Climate Change**
  Draft document with high-level recommendations on how Federal agencies can begin implementing the 2021 Executive Council Climate Change Directive.

4:00 pm **Adjourn**

Tuesday, December 14th

2:00 pm **Welcome, Introductions, and Day 1 Recap**
Pam Mason (VIMS), Wetland Workgroup Co-chair

2:10 pm **Update on "Synthesis of Shoreline, Sea Level Rise, and Marsh Migration Data for Wetland Restoration Targeting"**
Molly Mitchell (VIMS)

The goal of the project is to compile existing information about Sea Level Rise inundation under forecasted climate change, topography of bay shorelines, shoreline condition, existing wetland area and potential migration corridors, and additional relevant data and develop a methodology that synthesizes the information in a format that can be used to assist with marsh conservation and restoration decisions. This presentation will focus on the first goal.

2:40 pm **Shoreline Property Owner Motivations, Perceptions, and Drivers**
Amanda Guthrie (VIMS)

In Virginia, shoreline property owners decide if and how to modify their shoreline for erosion control (e.g., living shorelines, riprap). To understand property owner decision making, we conducted two surveys (in 2018, and 2020) to assess the factors they considered, their motivations, and their perceptions of various shoreline modification types. We show that one of the primary factors considered is effectiveness, yet there are misunderstandings on which shoreline modifications are most effective at erosion control and withstanding storm damage. Overall, property owners are aware that living shoreline marshes do support water quality and provide habitat for bay species.

3:10 pm **VIMS Shoreline Management Model**
Karen Duhring (VIMS)

The Shoreline Management Model (SMM) uses decision tree logic combined with available GIS data to generate tidal shoreline erosion control best practice recommendations. The model output shows where living shoreline approaches may be suitable for both undefended and armored shorelines where retrofits are possible. The SMM framework will be described and where to view the model output will be explained.

3:40 pm **Discussion**

- *How can the information from these projects assist with forecasting vulnerability and informing climate resilience decision-making for restoration activities?*
- *What opportunities are there to build this information into a resilience indicator? What would that indicator look like?*
- *Are there any science needs from what we heard today that we should include in the STAR science needs database?*

4:15 pm **Virginia Wetland Factsheet and Local Engagement Worksheet**
Kevin Du Bois (DoD Chesapeake Bay Program)

**This is a WWG-specific presentation, but all are welcome to stay on if interested.*

Kevin will provide an update on the creation and distribution of a Virginia Wetland Fact Sheet targeted towards wetland boards and will discuss key provisions and gather feedback on a Local Engagement Worksheet to help form the basis for attempts to gauge the use, value and effectiveness of the factsheet.

4:30 pm **Adjourn**