

Maryland Coast Smart Council

Maryland Dept. of Natural Resources
580 Taylor Ave., C-1
Annapolis, MD 21401

Meeting Minutes

November 20, 2014

The Coast Smart Council met at the Maryland Department of Natural Resources, 580 Taylor Ave., C-4, Annapolis, Maryland on November 20, 2014.

Council Members in Attendance:

Joseph P. Gill, Maryland Department of Natural Resources
Dr. Donald Boesch, University of Maryland, Center for Environmental Science
Fiona Burns, Office of Capital Budgeting, Maryland Department of Budget and Management (by phone)
David Costello, Maryland Dept. of Environment
Dr. Gerry E. Galloway, Jr., University of Maryland, College Park (by phone)
Don Halligan, Maryland Dept. of Transportation
Mostafa Izadi, P.E., Department of General Services
Kate Charbonneau, Critical Area Commission

Council Members Not in Attendance:

Chris Elcock, GWWO Inc., Architects
Sepehr Baharlou, P.E., BayLand Consultants & Designers, Inc.
Jenn Aiosa, Maryland Dept. of Planning
The Honorable Dennis Dare, Town of Ocean City
Mark James, Preparedness Directorate, Maryland Emergency Management Agency
Keith A. Holmes, Department of Business and Economic Development (by phone)
Thomas J. Lawton, Somerset County

Council Staff in Attendance:

Zoë Johnson, Maryland Dept. of Natural Resources
Nicole Carlozo, Maryland Dept. of Natural Resources

Guests in Attendance:

Linda Mott, Maryland DNR
Caroline Varney-Alvarado, DHCD
Ren Serey, Critical Area Commission
Meg Andrews, MDOT
Kevin Wagner, MDE
Dave Guignet, MDE

Welcome/Meeting Objectives

Secretary Joe Gill called the meeting to order and welcomed Council members. The first order of business was the approval of the Coast Smart Council September 16, 2014 meeting minutes. Secretary

Gill also announced that Governor O'Malley issued an executive order to expand the number of private sector members on the Commission on Climate Change. Zoe Johnson then provided updates from the Design and Siting subgroups.

Design Subgroup Update:

- The International Building Code Appendix G, which includes provisions for floodway construction and recommended building standards, has been adopted by the State.
- The 2015 International Green Construction Code (IGCC) is in process of being adopted. However, the Green Building Council will not adopt Section 402, which states standards for wetland, surface water protection, floodplain management, etc. Maryland already has similar and more robust standards in place. The Code will be revisited in 2015 since there may be elements of it that need to be reinforced.
- The group noted that the Green Council and the Coast Smart Council need to be cognizant of each other to make sure that they aren't duplicating work, but instead complementing one another.
- The Design Subgroup suggests that the Council recommends the use of resilient and flood-proof building materials. FEMA already has a manual that defines generic flood damage resistant materials appropriate for flood prone areas. DNR has also already made a shift in the material used in flood prone areas.
- The DGS Appendix C highlights floodplain management design criteria that are followed by all hired engineers. A 2-foot minimal freeboard is required. In 2015, item 3.1C will comply with Appendix G and the Army Corps flood construction manuals.

Siting Subgroup Update:

- Spatial/geographic siting guidelines are available at the site-level scale. For example, built infrastructure should be discouraged in the 0-2 feet sea level rise (SLR) zone; critical/essential facilities should not be located within 100yr floodplain or should be able to withstand a 500yr flood; natural features should be identified and protected during construction; and on/off-site mitigation should be used to enhance, protect, or create natural features.
- There are exceptions to these guidelines. The Council should eventually address these exceptions.
- DNR Staff is working to identify a representative from New York to participate in a future meeting to share their post-Sandy efforts.
- Federal construction design standards are being developed. A draft will be available in December.

Presentation: Maryland's Digital Flood Insurance Rate Map Program – Coastal Flood Map Update

Kevin Wagner of MDE provided an update on Maryland's DFIRM Program.

- The National Flood Insurance Program is a voluntary program created in 1968 and administered by FEMA that incorporates mapping, regulations, and insurance. MDE is the State coordinating office and provides technical assistance. Through this program, communities agree to apply and enforce regulations based on federal flood maps. However, each community's regulations are customized. Therefore, communities may choose to consider SLR

and other factors. Following participation in the Program, flood insurance becomes available to all community members (homeowners, business owners, renters).

- Flood Insurance Rate Maps delineate flood risk based on different frequency events (i.e. 100 yr and 500 year flood). Low Risk (X un-shaded), Moderate (X shaded), High Riverine/Tidal (A, AH, AO, AE), and High Coastal (VE) zones are mapped. Flood insurance is mandatory in high-risk zones.
- Floods do not always follow the map boundaries.
- Digital products are available, meet GAO guidelines (www.msc.fema.gov or mdfloodmaps.com), and can be used to print a flood risk profile. All counties except Allegany and Washington are currently available. CBRS and OPA areas are mapped to indicate where flood insurance is not available.
- Maps do not show where all the flooding can occur and do not take into account future conditions for climate/SLR/hydrology/land use change. Only current and historic data are used in map development. The Council may want to address the need for forward-looking analyses.
- A Coastal Analysis has been completed, which resulted in a new advisory boundary called the Limit of Moderate Wave Action (LiMWA). This line marks where wave heights are greater than 1.5 feet during the base flood. The area on the seaward side of the LiMWA is called the Coastal A Zone (CAZ). MDE recommends that new construction in the CAZ follow V Zone standards. Any community with land use authority can choose to enforce higher standards.
- The MD Model Ordinance is available for communities to better understand these requirements. IBC and IRC International Codes are also available. Higher standards include: 2 foot freeboard; subdivision access roads at or above BFE; electric panelboards elevated 3 feet above BFE; new construction in the CAZ built to V Zone standards; manufactured homes not allowed in floodways or V Zones; limit critical and essential facilities (not allowed in V Zones, CAZs or floodways); and limit accessory structures to 300 square feet.

Presentation: Critical Area Regulations for State Development – Proposed Climate Resilience Provisions

Kate Charbonneau provided an update on upcoming Critical Area regulations for State Development, which were proposed in October 2014. The public comment period has been closed and the Critical Area Commission will vote in December 2015 to finalize the regulations.

- The Critical Area is a 1,000-foot tidal water and wetlands buffer that balances development with habitat and water quality protection.
- The Commission is in process of updating regulations for State Development to consider SLR. See Chapter 5 Subtitle 2. The Commission recommends that State agencies consider climate change early in the review process. Each agency should consider SLR for the design life of the project and identify/incorporate climate resilient practices. Agencies should preserve/protect/maintain potential wetland migration areas within the development area and within adjacent land within that agency's right-of-way. If wetland migration areas will be impacted, then the Agency should justify their impact by explaining why it is unavoidable, and then assess ecological features that could be enhanced or restored to mitigate the impact.
- The purpose of these provisions is to promote dialogue about climate change, future wetland areas, long-term access, and coastal hazards. No mitigation is required.
- Next Steps: provide guidance on 1) ecosystem resiliency practices, and 2) mitigation for wetland areas that do not exist yet (there may be off-site mitigation potential for these impacted areas).

Council Discussion

- Do State projects follow local floodplain codes? The Council could recommend following local standards if they are higher and promote consistency.
- The Council could recommend the use of flood resistant materials for projects within vulnerable zones.
- The Council needs to revisit current siting/design exceptions.
- The Council should discuss the possibility of incorporating future climate/flooding/SLR into flood insurance maps, instead of reliance solely on historic data.
- The Council could drive future recommendations related to ecosystem resiliency practices.

Member Updates

- Zoe updated the group on a number of efforts relating to ecosystem resiliency and best practices.
 - DNR is partnering with TNC on a Coastal Resiliency Assessment to identify priority natural/green infrastructure that enhances coastal community resiliency. The project will also address potential restoration locations and ultimately integrate risk reduction values into the ecological criteria that currently drive conservation efforts. The final mapping products could be used to target future disaster funds, water quality funds, or mitigation.
 - The Army Corps will be releasing the results of the North Atlantic Coast Comprehensive Study. This study identified focus areas impacted by Hurricane Sandy and promotes the use of green practices to combat coastal hazards. A workgroup has been convened to develop performance measures for natural and nature-based features in order to measure the success of these practices.
 - The Chesapeake Bay Agreement has a Resiliency Goal that will address the effectiveness of existing restoration policies. A Resiliency Workgroup was just convened.
- Don Boesch has been tracking new climate literature and sea level rise projections to compare with Maryland's projections. New research has increased State confidence of the MD projections. He noted that actions in the next 30 years relating to global emissions will have the most significant long term impacts and that we should keep that in mind when discussing adaptation.
- The Design and Siting subgroups will continue working on draft language and review existing guidelines to develop design and siting criteria. The subgroups will look at the Federal Design Guidelines (to be released in December) and research other state guidelines.
- The next meeting will be in January 2015. Location TBD.

Wrap Up

Zoë closed the meeting by encouraging participation in the Design and/or Siting subgroups. Contact Zoe if interested. She also mentioned that all meeting materials would be posted to the Council website: <http://www.dnr.state.md.us/climatechange/CSCouncil/index.asp>