

CMWG - Blue carbon and habitat: Notes from December meeting

Purpose: The purpose of this document is to document what we have collectively learned about Blue Carbon systems in Maine since [Maine Won't Wait: A Four-Year Climate Action Plan](#) was adopted. For additional context, please see the [recommended strategies from the Coastal and Marine Working Group \(2020\)](#), which includes an assessment of what we knew about blue carbon systems in Maine at the time. This will serve as a baseline for future discussions on proposed strategies that this subcommittee will recommend to the Coastal and Marine Working Group for inclusion in the broader plan.

This document will also serve as notes for the “Blue Carbon and habitats” subcommittee of the Coastal and Marine Working group on *Friday, December 15 from 1:00 to 2:30 via Zoom*.

Contact: jgabrielson@mcht.org.

QUESTION 1: What have we learned about habitat and blue carbon systems in Maine since 2020?

Short, bullet point updates are fine. If possible, please include links to papers, research articles, or other resources and/or contact info for key personnel.

- [EPA Region 1: The Blue Carbon Reservoirs from Maine to Long Island, NY](#)
- 2023 Maine Blue Carbon Symposium: [Packet](#) (includes speakers bios) and [notes](#)
- DEP mapping of seagrass distribution in Southern and Midcoast Maine—updates prior DMR mapping layers created 11-19 years previously; low tide orthoimagery and seagrass polygons available through [Geolibary](#) (see “imageryBaseMapsEarthCover” and “biota”)
 - [2021: Eliot to Cape Elizabeth \(Southern Maine\)](#)
 - [2022: Cape Elizabeth to Phippsburg \(Casco Bay\)](#)
 - 2023: Phippsburg to St. George, including Merrymeeting Bay (Midcoast)(reporting to be completed March 2024)--mapped habitat includes fringing and tidally constricted salt marshes
- *Maine Carbon Budget, v2, to be incorporated into MCC Scientific and Technical Subcommittee assessment report (Dec. 2023?) and DEP’s Biennial GHG Budget (Jan. 2024?)—led by Ivan Fernandez and Dan Hayes (UMaine) and Stacy Knapp (DEP) w/ blue carbon calculations provided by Claire Enterline, Bev Johnson and Kristen Puryear (salt and brackish marshes), Angela Brewer (seagrasses), Nichole Price (macroalgae/seaweeds)—release date uncertain (**Angie can update this item ASAP**)*
 - *budget will include BC habitat acreages, stocks, fluxes—most refined for salt marshes based on available core data*
- *Hannah Webber & Stefan Claeson - using multispectral imagery to map intertidal rock weed.*
- *Casco Bay Living Shorelines - assessments and reports*
- *Manomet effort to look at SLR impacts on intertidal mudflats*
- *DEI - Rob Holberg’s work on sediment pH*
- *CoastWise Manual*
- *DOI/Duke [Roadmap](#) for Natural-Based Solutions*

- *The Nature-Based Solutions Guide 2.0, a compendium of federal examples, guidance, resource documents, tools, technical assistance and funding programs, can be found [here](#).*
- *Tidal marsh hydrology - **Jeremy** add links from Dave Burdick et al*
- *2023 Open access [article](#) on “Recent Acceleration of Wetland Accretion and Carbon Accumulation Along the U.S. East Coast”*
- *Suzanne Greenlaw’s work on sweetgrass and intertidal co-management in ANP*

QUESTION 2: What ongoing research and assessment projects are you aware of related to blue carbon systems in Maine? *Short, bullet point updates are fine. If possible, please include links to papers, research articles, or other resources and/or contact info for key personnel.*

- *DEP’s Marine Vegetation Mapping Program—maps [1/5 of coastline](#) annually on rotating basis for seagrass and salt marsh habitat*
- *Add CBEP/FOCB/Team Zostera/Manomet 2024-2025 work through Maine Coastal and Marine Climate Action fund (eelgrass stressors, pilot seeding)*
- *Add Bates 2024-2025 work funded through Maine Coastal and Marine Climate Action fund (LiDAR drone mapping of salt marshes)*
- *Add other funded projects from 2022 and 2023 Maine Coastal and Marine Climate Action fund solicitation (**Angie waiting for final list of awardees to update this and prior two bullets**)*
- *Meredith White (DMR) Intertidal monitoring (may fall under the “Monitoring” subcommittee?)*
- *Chris Feurts & Neil Ganju’s “Marshes for Maine’s Future” Project (**Jeremy** will add link)*

QUESTION 3: Who else should we be talking to?

- ***USGS - Todd Chaudry** **Todd Chaudhry, Ph.D. Science Advisor, Northeast Region, 703-424-8183** tchaudhry@usgs.gov*
- ***Jon Woodruff***
- ***Doug Rasher, PhD, Senior Research Scientist @ Bigelow** drasher@bigelow.org (207) 315-2567, ext. 318*
- ***Jessica Reilly-Moman @ UMaine***

