



Blue Carbon Collaborative (BCC)

Meeting #11 - Notes

Thursday, February 8th, 2024

10:00am – 12:00pm Pacific Time

Register in advance for this meeting:

https://us02web.zoom.us/join/zoom/register/tZcrcOqspzsjEtccqEJrWH8GPaedx193_UI8

After registering, you will receive a confirmation email containing information about joining the meeting.

Meeting Objectives:

- 1) Share about latest BCC participant projects and developments.
- 2) Learn about the efforts of blue carbon working groups and networks across the country and their current projects or initiatives.
- 3) Hear about lessons learned and approaches, as well as needs and opportunities to consider as each groups' efforts move forward.

Meeting Agenda:

10:00am	Welcome, Roll Call, Review Agenda
10:10am	Panel Presentations “Learning from other Blue Carbon Networks and Blue Carbon Collaborative Planning” • Phil Colarusso, Northeast Blue Carbon Work Group, Environmental Protection Agency • Chris Janousek, Pacific Northwest Blue Carbon Working Group, Oregon State University • Jazmin Dagostino, Blue Carbon Network, The Pew Charitable Trusts • Jaxine Wolfe, Coastal Carbon Network, Smithsonian Institute
10:45am	Discussion
11:05am	Planning for the Future of the Blue Carbon Collaborative Poll Discussion Topics • <i>What topics would you like to hear about in 2024-2025?</i> • <i>What data and/or information would help you understand or move forward blue carbon initiatives/projects?</i>



	• Are there any tools and/or resources that would help you understand or move forward blue carbon initiatives/projects? • Are there any opportunities for blue carbon initiatives/projects you see in your region?
11:45am	Updates Project updates and developments (all)
11:55am	Next Steps
12:00pm	End of Meeting

Shared links during the meeting:

- SF Bay Estuary wetland GHG inventory (Lisa Beers from Silvestrum) - <https://www.pewtrusts.org/en/research-and-analysis/white-papers/2022/08/wetlands-restoration-boosted-greenhouse-gas-captured-by-san-francisco-bay-estuary>
- Oregon white paper on blue carbon - https://www.pnwbluecarbon.org/files/ugd/43d666_1859316df7ef415db84fd5d29f6b1d20.pdf
- More for California (SFEI) - <https://www.sfei.org/projects/blue-carbon-calif-climate-action>
- How States Can Develop Blue Carbon Programs - <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2023/12/how-states-can-develop-blue-carbon-programs>
- Oregon white paper - <https://static1.squarespace.com/static/59c554e0f09ca40655ea6eb0/t/6155d92290f3f618abe61231/1633016103035/OR+NW+bc+data+and+approaches+white+paper.pdf>
- Webinar Addressed Coastal Landscapes in Transition - <https://www.pewtrusts.org/en/about/events/2022/webinar-to-address-coastal-landscapes-in-transition>

Meeting Notes

Phil Colarusso, Northeast Blue Carbon Work Group, Environmental Protection Agency

- The Northeast Blue Carbon Work Group compiled blue carbon data from a variety of sources to better understand blue carbon in the Northeast.
 - Goals: compile existing habitat mapping data, compile sediment mapping data, merge these datasets to create carbon heat maps, and compile a blue carbon baseline.
- Once the data was normalized, they were able to show carbon stock data throughout the Northeast. This led to the production of “Carbon Heat Maps”.
 - The Carbon Heat Maps show a regional interpretation of the data.
- Conclusions:
 - Great opportunity for collaboration and leveraging data from unexpected sources.
 - Need to understand error/variation associated with these data of opportunity type analyses.



- Data of opportunity type analyses: pulling data from people using a variety of methods with a multitude of goals thus leading to lots of different data.
- Importance of scale
 - The mapping of the habitats is the greatest source of error and variation.

Chris Janousek, Pacific Northwest Blue Carbon Working Group, Oregon State University

- The Pacific Northwest Blue Carbon Working Group was established in 2014 with the goal to advance blue carbon science, policy, and data sharing.
- The first funded project for the working group was to figure out the ecosystem carbon stocks in the wetlands in the region. They found that there is increasing carbon stocks along a wetland elevation/salinity gradient (low carbon stocks - seagrass > low marsh > high marsh > tidal forest – high carbon stocks).
- The Pacific Northwest Blue Carbon Working Group also created a blue carbon database for the West Coast. They found that the carbon stocks were lowest in the tidal flats and seagrass meadows. The marshes had intermediate carbon stocks, and the carbon stocks were the highest in the woody wetlands.
- Lessons learned:
 - Working group successes
 - Cooperation > competition
 - Multi-institutional partnerships; shared data, effort, equipment
 - Focus on filling specific data gaps
 - On-going communication with end-users
 - New directions
 - More research to fill remaining data gaps regionally
 - Scrub-shrub wetlands, BC in restored sites, SLR modeling
 - Collaboration to meet policy needs – tools, syntheses
 - Increasing outreach: managers, Tribal Nations, students

Jazmin Dagostino, Blue Carbon Network, The Pew Charitable Trusts

- Blue Carbon Network is a state-focused community of practice operating at a national scale, hosted at the Pew Charitable Trusts
- Goals: to discuss, connect, and advance blue carbon
- The Blue Carbon Network puts on webinars and workshops and has a variety of resources (such as case studies)
- They have been helping to incorporate coastal habitats into Natural and Working Lands policies.
- The Blue Carbon Network provides data support and provides policy recommendations for states looking to set blue carbon goals and leverage climate funding.
- Looking ahead the Blue Carbon Network is focused on engaging members and collaborating with new members.

Jaxine Wolfe, Coastal Carbon Network, Smithsonian Institute



- The Coastal Carbon Network operates out of the Smithsonian Research Center. Their goal is to accelerate the pace of discovery in coastal carbon science by serving a community of researchers and practitioners with data, synthesis opportunities, and tools.
- Recognizing that there is a need in coastal wetland carbon science for data sharing and accessibility and ease of use, inter-study comparability, connectivity and scalability of information and building a community of practice around blue carbon data.
- They have created a Coastal Carbon Data Library/Atlas using nearly 10,000 sediment profiles from 66 countries and over 62 years of sampling.
- They have found that is important to have an idea of carbon stores by country instead of using one estimate for all countries, as the carbon stores vary widely.
- They have learned that it is just as important to gather a community as it is to gather data.
- There needs to be a focus on who you are providing the data to and what they need.

Discussion

- *For Jaxine: How does someone get involved in the Coastal Carbon Network?*
 - Jaxine: The Coastal Carbon Network is always open to setting up a meeting, particularly if people would like to add data to the Atlas.
- *For Phil: What are some of the unintended benefits that resulted from the project you worked on?*
 - Phil: One of the major benefits was that this was the first time anyone had brought together seagrass and salt marsh maps in the Northeast. This has resulted in a variety of stakeholders being interested in the findings.
- *For Jazmin: How can networks enhance collaboration to advance shared priorities?*
 - The Blue Carbon Network does not exist in a vacuum and there are lots of groups working on blue carbon. To drive action at the state and national level, we need to continue actively collaborating with different groups and communities of practices with a variety of areas of expertise.
- *Do we finally have enough data to move forward and actually put our knowledge to action? Are we close to that point?*
 - All: It is important for the decision makers to understand the error bar around all the data in order to make informed decisions. There are some questions where we have enough data to move forward confidently. However, there are some questions where we may not have enough data yet. When it comes to policy, we cannot let perfection be the enemy of the good. There needs to be political will in order to implement the laws that need to happen for protection and restoration.
- *As sea level rise occurs, and the salinity increases, how should we think about managing wetlands?*
 - Chris: in the short term, the next few decades of sea level rise might actually be good for wetlands and carbon storage. However, at some point we will likely hit a tipping point where sea level rise will increase substantially to the point where wetlands will not be able to keep up.



- Phil: In the Northeast, they are quite concerned about this issue as they are quite congested along the coast, and this does not allow for retreat. It is likely that the Northeast will lose a lot of marsh going forward.

Planning for the Future of the Blue Carbon Collaborative

Discussion Topics

- *What topics would you like to hear about in 2024-2025?*
 - Addressing Coastal Landscapes in Transition
 - Policy updates meeting – about where the policy is currently headed (CQ idea)
 - How we can further policy at a national level and with that the possible change of administration and how to put our heads together to deal with that
 - Protocols and methods for different stakeholders especially small stakeholders who are trying to figure out where to start with blue carbon
- *What data and/or information would help you understand or move forward blue carbon initiatives/projects?*
 - How to integrate blue carbon sampling into the monitoring of wetlands
 - Should kelp be included as a blue carbon habitat?
 - What do we know? And what do we need to do to verify that inclusion?
 - Any advancement in that science?
 - How to augment wetlands to stay ahead of sea level rise, what works and what does not?
 - Which ones preserve habitats? Better for sequestration? When is better to let it go to seagrass?
- *Are there any tools and/or resources that would help you understand or move forward blue carbon initiatives/projects?*
- *Are there any opportunities for blue carbon initiatives/projects you see in your region?*
 - Collaborative work between Smithsonian and PNNL working at terrestrial aquatic interface and trying to understand marsh migration and ghost forests and what that turnover means.
 - In the Pacific Northwest there was a 2-3 hour workshop where researchers were brought together to have an in-field training on blue carbon sampling.
 - Could be a valuable training opportunity for people who are doing restoration in the area, maybe not necessarily for people measuring blue carbon themselves but could bring awareness to blue carbon.
 - Interested in hearing from individuals on funding and financing sides – how they are thinking about raising funding for their work in blue carbon.
 - In Southern California, there is a continued interest in sustainable agriculture
 - Overlaps between blue carbon and soil carbon science and thinking about how sustainable ag can play a role

Project updates and developments (all)

- WildCoast is sponsoring a bill: AB 1992. They will send around a sign on letter soon.
https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB1992



- Matthew Costa: a group of researchers that he is part of have gotten funding to get started working on developing a protocol for assessing carbon sequestration benefits associated with kelp restoration. They are working on getting more funding.
- Coastal Quest is partnering with WildCoast, Seatrees, and Scripps to move forward kelp BLUE+ the science and methodology for getting some alignment on kelp carbon measurements.