



Blue Carbon Collaborative (BCC)

Meeting #9

Tuesday, May 9th, 2023

12:00pm – 1:30pm Pacific Time

Recording Link:

https://us02web.zoom.us/rec/share/2zZmu2pjUqAcLkGPyNETw7N_wMN6nzSC6k0NRdsOVEyX0_irBFXCaKu1iSvh5Vzn.Bv_i8PThY9AoawwB

Meeting Objectives:

- 1) Share about latest BCC participant projects and developments.
- 2) Learn about efforts to restore and rebuild blue carbon habitats that have been impacted by climate change and ecosystem degradation to restore their ecosystem services. We will hear about lessons learned and approaches, as well as needs and opportunities to consider.

Meeting Notes:

Relevant Links

- [SeaTrees' Video](#)
- [Description of CNRA's Nature Based Solutions Work](#)
- [Description of the MPA Collaborative's New Climate Initiative](#)

Updates

- SFEI upcoming workshop- Activating science and management communities for blue carbon solutions (May 10, 2023, 9-12pm)
- MPA Collaborative Network Climate forum in fall (reach out to jamie@mpacollaborative.org)
- CNRA is requesting input on a Climate Sequestration and Climate Resilience project registry
 - Workshop today to collect feedback 5:30-6:30pm

Panel Presentations

- **Tannia Frausta Illecas (Costasalvaje)- “Lessons Learned of Restoration Projects”**
 - Costasalvaje has 4 community-based restoration projects
 - SD County: 42 acres (516 ton/c), Laguna San Ignacio: 124 acres (7788 ton/c), Bay of La Paz: 100 acres (5689 ton/c), Oaxaca/Chiapas coast: 2681 acres (30,459 ton/c)
 - Removing invasives, conducting hydrological restoration and planting 182K-1 million mangroves
 - Key steps to do a restoration project



- Select restoration site, characterize the site, create a restoration objective, define restoration activities
 - Select a work team (members with many different roles)
 - Make a plan for monitoring, permits and authorization, funding
 - Be open to expanding restoration efforts- develop ways to do so
- **Monique Fountain- Elkhorn Slough NERR & Elizabeth Watson- Stony Brook University – “Building Resilience in a CA Coastal Salt Marsh (Elkhorn Slough)”**
 - Slough has history of diking, low sediment supply, subsidence, remaining marshes are sinking, prone to SLR
 - ESNERR Tidal Wetland Program (Stakeholder Group helped choose restoration options)- Chose to conduct thick soil addition, recontoured steep hill sides to allow for marsh migration in Hester Marsh
 - Other options considered: conserve existing tidal marshes, facilitate migration to higher ground, thin layer sediment addition
 - Monitoring Results (monitored across all habitat types)
 - Restoration sites- showed increased carbon sequestration/sediment accumulating, but less than at control site, sequestration at degraded marsh higher than expected
 - potential to reduce nitrogen emissions through restoration
 - Tradeoff – get blue carbon function now vs future climate resilience
 - **Kevin Whilden- SeaTrees and Sustainable Surf**
 - Businesses are seeking positive solutions to climate change
 - SeaTrees Impact Model- Let’s get money to blue carbon projects
 - ST does: Mangroves, kelp, watershed, coral
 - 18 projects, over 3mil seatrees planted, funded by corporations/donors
 - Projects in mangrove restoration, kelp, kelp carbon studies

Discussion

- Would a hybrid approach work - moderate soil deposition followed by periodic thin deposition?
 - Monique: Great idea if there is consistent dredging. Dredge material is typically not clean enough to put back into marsh. Cost for thin deposition is high.
- Kevin, will your methodology only apply to giant kelp?
 - Kevin: It will start with giant kelp. The goal is how do we apply methodologies to all sort of kelp carbon projects.
 - What magnitude of funding do you have?
 - Kevin: 1.5 million but we are looking for more. If anyone is interested in joining that study let us know.



- What tips would you give to someone starting a carbon restoration project?
 - All: Know your story and listener, understand the ecosystem, engage with the community, define goals/objectives, partner with blue carbon experts, understand potential pitfalls (e.g. wetland restoration may emit tons of methane)

- Soil accumulation- If you are going to add a lot of soil what are the pros and cons of adding soil that already has some organic matter in it (boosting cs by adding more carbon rich soil)?
 - Monique: we added biochar, next project we will add nutrients to the top soil
 - Beth: initially I was skeptical about using soil additives (there is lots of nutrient add in from the local agriculture)

- Is agriculture primarily driving the nitrogen load in Elkhorn Slough (Beth & Monique)?
 - Monique: yes

- For Tannia and/or Kevin - once the carbon baseline has been calculated in C/ton, how do you monitor/ verify the additional carbon sequestered over time?
 - Tannia: verification methods suggest you to check every 5-6 years
 - Kevin: each marketplace has different rules, voluntary market does annual verification

- Comments
 - Similar to Tomales Bay: at least C content in mudflat was no different than that in nearby seagrass. I agree that mudflats (and deep sea mud) is under-valued for carbon storage.

Next Steps

- Next Blue Carbon Collaborative Meeting: **Sept 12- "Funding and Financing Blue Carbon"**
- If you have announcements to share with the collaborative, email: tina.lee@coastal-quest.org