Blue Carbon Collaborative (BCC)

Meeting #8- Meeting Notes

Tuesday, March 7th, 2023

12:00pm – 2:00pm Pacific Time

Link to Meeting Recording: https://us02web.zoom.us/rec/share/NUisWxVNmk44yz-AI_xLdVEkjLUPXj1Fy1EV1cP03m4oxHfnNBTQd3fojBUovBXl.iDMbXrBpXqm4OWHY

Meeting Objectives:

1. **Share about latest BCC participant projects and developments.**
2. **Learn about examples and case studies about the integration of blue carbon into habitat and climate planning efforts. We will hear about lessons learned and approaches, as well as needs and opportunities to consider as we move forward inclusion of blue carbon into natural resource conservation planning efforts, Regional Conservation Investment Strategies, Habitat Conservation Plans, and more.**

Meeting Notes:

Updates:

- WILDCOAST's San Dieguito and Batiquitos Lagoon restoration projects are going well
    - Showing up to 90% survivorship
    - WILDCOAST was able to collect soil samples from 5 lagoons around San Diego county (total of 500 samples)
    - By next meeting they should have an update on the carbon stock of San Diego's wetlands
- AB45 bill is in the works
- Melissa Ward (San Diego State University) is working with the OPC and CARB to get blue carbon (tidal marshes and seagrasses) on the next Natural Working Lands (NWL) scoping plan
    - CARB needs to understand the additionality and changes to sequestration rates and new emerging stressors, needs to develop new models
    - Including blue carbon in the next NWL scoping plan would make a lot of progress toward these habitats' recognition for eligibility in federal goals
    - There are opportunities to make a statement, write a letter from the BCC, to help support this effort, Melissa just needs to think about when that will be beneficial
- DeAnza Natural Draft EIR
    - City of San Diego just released a draft EIR for a wetland restoration project under one landowner that restores 150 acres in Mission Bay
- Next meeting: **"Blue Carbon Ecosystem Services Under a Changing Climate" (May 9th)**

Panel Presentations "Blue Carbon and Opportunities in Habitat and Climate Planning"

- **Hilary Stevens,** Coastal Resilience Senior Manager, Restore America's Estuaries (RAE) **"Blue Carbon"**
    - RAE's role
        - advocates for and convenes coastal-minded organizations across the US
        - helped create the standards for blue carbon markets in collaboration with Verra
        - educates lawmakers on initiatives that benefit blue carbon
        - works on projects to raise awareness for and coordinate blue carbon initiatives
    - Recent Policy Initiatives
        - Blue Carbon for our Planet Act (2020, 2021), Blue Carbon Protection Act (2021)
        - Blue Carbon for our Planet Amendment was added to America Competes but then removed (Currently the government is divided politically, so RAE is unsure where we can make further progress)
    - RAE facilitated and assembled the Blue Carbon National Working Group
        - Made up of a few dozen experts in federal policy, economic markets, science, and project implementation
        - Developed policy recommendations in collaboration with the NAE
    - A National Blue Carbon Action Plan: Policy Recommendations
        - Establish an interconnected blue carbon government working group
        - Strengthen protections for existing blue carbon ecosystems and remove barriers to blue carbon restoration projects (current regulatory processes)
        - Support climate financing, public-private partnerships and market based mechanisms
    - Speaker's Email: HStevens@estuaries.org
    - RAE produces a monthly blue carbon email

- **Scott Fleury,** Principal, Habitat Conservation Planning and Implementation, ICF **"Regional Conservation Investment Strategies: A possible Blue Carbon Mitigation Tool"**
    - Regional Conservation Investment Strategy programs (RCIS)- 7 in existence, 4 proposed
        - Created by AB 2087 (2016), became effective 2017
        - RCIS is a planning process/document prepared by any public agency, streamlines mitigation
            - Focuses on: species needs and mitigation, is a mechanism to establish advance mitigation (done through mitigation credit agreements, MCAs)
            - State habitat conservation tool but can serve other needs via coordination and is compatible with HCPs and NCCPs
    - Key elements of a RCIS
        - Focuses on a planning area
        - Addresses focal species, mitigation locations, measurable objectives, climate adaptation opportunities, habitat connectivity and multi-benefit conservation

strategies (examples: land acquisition and protection, habitat restoration, wildlife crossings, fish passages, MCAs, carbon credits- discussed for forests but no RCIS to date has integrated)
    - Carbon Additionality
        - Calculating what credits are worth using and stacking is difficult
        - You can't count carbon that has already been protected
        - For example: In HCPs, certain area may be protected by an HCP, so must be excluded from any carbon crediting
    - Blue Carbon in RCIS
        - Would require a lot of upfront resource investment
        - Carbon sequestration calculations in a system like this would be really challenging
        - Example: Humboldt Bay – they are concerned about SLR, an RCIS may be a good way to account for it
    - RCIS in a Nutshell
        - Can be a tool using existing science and stakeholder engagement to develop a multi-benefit conservation focus and advanced mitigation framework
    - Speaker's Email: Scott.fleury@icf.com

- **Heather Kramp,** Senior Environmental Specialist, Port of San Diego, **"San Diego Bay Eelgrass Blue Carbon Study"**
    - Port of San Diego History
        - Established in 1962, includes 5 members cities and 34 miles of waterfront
        - Manages the land and submerged tidelands around San Diego Bay
    - Blue Carbon and the Port
        - The Port also has a blue economy incubator which includes projects in:
        - Nature-based solutions, aquaculture, emission reduction, climate resiliency
        - 5 years ago the Port had no initiatives on blue carbon, they now have 5
        - Port has many partnerships for this work including colleges, the Coastal Conservancy, and a variety of other organizations
    - San Diego Blue Carbon
        - San Diego has 2600 acres of eelgrass as of 2020
        - This encompasses 50% of all the eelgrass in Southern California and 17% of all the eelgrass in California
        - There are big reserves in the South Bay of the Port of San Diego
    - Port of San Diego's Eelgrass Study
        - 2017: Started assessment with WILDCOAST to look at the Port's eelgrass population
        - Project paused during COVID until MARAD offered to fund it in 2021
            - Interested in the GHG emission reductions benefits of eelgrass (Port wants to reduce their emissions by 80% by 2050)

- Year 1 Study (MARAD provided $175,000 for 1-year study)
    - Looked at if the Port's eelgrass stores carbon and if there are carbon storage hotspots
        - 73% of Port's eelgrass carbon is stored is in South Bay (calm warm waters, retains fine grain sediments)
        - 170,900 metric tons of CO_2 in SD Bay's blue carbon resources (equal to roughly half of the port's annual emissions)
    - Older eelgrass beds contain more carbon content and restored beds have a lot of carbon storage potential
- Year 2 Study (MARAD provided an additional $175,000 in Oct 2022)
    - The Port is looking to build a carbon budget and assess the bicarbonate pathway
    - The Port is brainstorming for a 3rd year of research
    - Received interest from the Navy and Builder's Initiative and is continuing to connect with WILDCOAST
- Lessons the Port has Learned
    - All regulatory levels interested in blue carbon and the opportunities are diverse
    - Lots of research still needs to be done, data sharing is important
    - Slow to get projects moving and approved and lots of funding needed, coastal zone projects are expensive
- Speaker's email: Hkramp@portofsandiego.org

Discussion

- Why might it be advantageous to work on blue carbon planning efforts at the state or local levels?
    - Voluntary carbon markets- there is no mandate on federal land to sell carbon rights and there is unlikely to be anything passed
    - A few states passed legislation for state land (Virginia and Hawaii)
    - Virginia Coastal Reserve Project
        - The entire restoration project was on state land so they needed state permission to go ahead as a carbon market project
    - When states take action on this, it can have a big impact
    - States have programs that look at their GHG inventory
    - If states start including how to manage the coastal zone it can be an incentive to manage public land with an eye for blue carbon
    - A lot of opportunities for progress at state levels, easier to pass legislation and pursue alternative pathways to management

- How do you start an RCIS planning process and get it funded?
    - Staff needs to build interest in a project and needs a public agency as a sponsor

- RCIS are supposed to be a collaborative and partnership-driven process
- They are supposed to be an overall guidance and conservation tool available for anyone to use once established
- Funding sources
  - State Wildlife Conservation Board- provides RCIS preparation funding, anyone interested should reach out to them to get an application

- What would be the opportunities and hurdles to connecting eelgrass restorations with the voluntary carbon markets?
  - Virginia Reserve's aerial photography monitoring: they could get the seagrass's aerial extent but couldn't determine how dense it was and therefore could not determine the total biomass
  - Poor water clarity in colder waters limits the mapping capabilities necessary to quantify eelgrass for the voluntary carbon market
  - Need more data out there on blue carbon in order to streamline/assess (Forests have a more robust data baseline)

- Did the Port of San Diego eelgrass study look at sediment accumulation rates? Is the Port going to publish that study?
  - Publishing is the goal and the 1st year study was focused on above ground biomass
  - They did do a lot of meter cores but that data was inconclusive
  - The Port is now working to tease out sequestration rates and look at how much is being sequestered annually
  - Long term goal: Incorporate coring into the Port's eelgrass studies and build a long term data set of what storage looks like

- Would the Port of San Diego manage the eelgrass any differently if they were optimizing for species present and water quality (the Port is focusing on emission reductions and carbon sequestration)? Or would the Port's sequestration strategy also optimize for these other values?
  - San Diego Bay eelgrass is very small, likely not getting enough nutrients from freshwater flowing into the Bay
  - Port is looking into different options for the eelgrass that may incorporate habitat enhancement and other benefits
  - Will plant more eelgrass if it will help them reduce GHG emission, but maybe they should also be looking into making the eelgrass denser and more robust
  - Under the California Eelgrass Mitigation Policy, any eelgrass affected by project must be mitigated for 1:1.2
  - Coastal zone work is expensive, this typically SD projects design around eelgrass

- What are the costs and benefits of verifying a Verra carbon credit versus getting other sources of funding?
    - The Verra credit process is expensive and not economically viable except for large projects (difficult to get, most coastal zone is not under 1 owner)
    - Most funders that want to get involved in blue carbon are in it for the credits and want to see verified credit
    - Once we get a precedent set for blue carbon it should be easier and faster
    - From a restoration standpoint blue carbon projects may look good from a finance standpoint they may look bad
    - However, we should take care in the framing of this issue
    - Bundling these projects with other seascape level projects may be good investments
    - There is a group that interested in seeing we can adjust the demand or change what is getting qualified as a habitat investment
    - We should continue to adjust what qualifies as a high quality investment

- How does management of the sediment deposition process assist in the eelgrass health/SLR issues?
    - Port has engaged in conversation with the Army Corps of Engineers to use dredge material to acclimate eelgrass to SLR (this will likely not start for a while)
    - Some projects on East Coast have experimented with using dredge material
    - Elkhorn Slough has also experimented: https://www.elkhornslough.org/tidal-wetland-program/hester-marsh-restoration/

- What other planning tools would be useful for all of us to look into?
    - Habitat conservation plans- have typically looked at terrestrial carbon but any overall coordinated effort to do coastal restoration and integrate carbon would be beneficial as a way to help reduce the cost of the restoration itself

- Can you get funding for habitat restoration/coastal resiliency funds and mitigation/carbon credits for the same project or do they have to be separate?
    - It depends on the land type and classification
    - Federal/state programs wouldn't support mitigation on already protected lands or their own properties
    - Ex: Port has mitigation bank in South Bay that would be wetland habitat mitigation
    - Couldn't do funding via both options because of additionality
    - Port makes a lot more money off conservation mitigation than blue carbon credits
    - The ecosystem is still getting the co-benefit just not the monetary value from it