Climate Resiliency Workgroup Meeting

Monday, August 17, 2020
1:30 PM – 3:30 PM

Webinar*: https://global.gotomeeting.com/join/329482573
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Meeting Materials:
https://www.chesapeakebay.net/what/event/climate_resiliency_workgroup_crwg_august_2020_meeting
This meeting will be recorded for internal use to assure the accuracy of meeting notes.

Action Items

- ✓ CRWG Leadership will look at the notes from the meeting today and see if anything aligns with the CRWG Logic & Action Plan.
- ✓ Based on the topics that align with the Logic & Action Plan, Julie will reach out to the workgroup members on direction for these topics and get their input.
- ✓ The next step will be to reach out to the finance coaches to continue the conversation to move the finance strategies forward.
- ✓ A potential action item is to plan a future cross workgroup meeting with STAR since the SAV and Wetland Workgroups are also interested in this topic.

AGENDA

1:30 PM **Welcome and Meeting Overview – Co-Chair Mark Bennett (USGS) and Erik Meyers (The Conservation Fund)**
Workgroup Announcements:

- FY20 GIT-Funding Update – Julie Reichert-Nguyen (NOAA)
  - The CRWG submitted a proposal titled, "Blue Carbon Literature Review & Carbon Project Type Comparison to Inform Possible Financing Strategies," but after receiving feedback from the Chesapeake Bay Trust (CBT), it was withdrawn from the group of proposals. The CBT informed the proposal leads that there were other efforts and studies already completed, and the deliverables of the proposal would be duplicative.
  - The CRWG leaders want to meet with the Finance Coaches to better shape the proposal. They also see this work fitting better as a STAC proposal for next year. They are still evaluating the best way to move forward, but it is an interest of the CRWG to pursue this topic.
  - The CRWG supported a GIT proposal through STAR titled, "Modeling climate impacts on submerged aquatic grasses (SAV) in

Chesapeake Bay." Other GITs are submitting proposals with a climate aspect as part of the project. These proposals can be found on the calendar event page.

1:40 PM **Finance 101 – Timothy Male (Environmental Policy Innovation Center)**

Tim provided a basic understanding of conservation finance to the CRWG with a focus on his realm of work for water and land protection but including aspects on climate resiliency. He first emphasized there is a difference between "funding" and "financing." Funding is providing a one-way financial resource to support a need, program, or project. Financing is a two-way acquisition of money for a program or project. The monetary resource need is filled from borrowed money which is why a big part of conservation finance is having trust in another entity or person. Procurement Mechanism is another approach, and examples of this is bidding for a contractor and pooled funding.

There is approximately $20 billion U.S. Private Funding and Finance for conservation. This is broken into return-seeking entities and charity. Examples of charities contributing to conservation are The Nature Conservancy (TNC) and Natural Resources Defense Council (NRDC). On the private side, about half of the money is going towards mitigation such as wetland mitigation. A large portion is going towards sustainable agriculture, and the rest is going to other projects. Return – seeking, profit seeking section, is going to grow faster than the charity portion.

There has been a growth in investment for conservation such as forest carbon transaction growth, carbon revenue (renewable energy investments, energy efficiency investments), and green bonds. Tim does note that this rise may not continue in 2020 due to the global pandemic, but environmentally related investments for the future are of interest for investors.

Tim provided an example of wetland mitigation which the market for credit of streams and wetlands reached $4.8 billion in 2019. This market works because of very strong regulatory regimes, in particular the Clean Water Act that states avoiding damage of wetlands or streams, but if they are damaged, a certain standard must be met. The federal standard is no let loss which provides a clear goal for regulators and planners. The example he gave of wetland mitigation was at the Sax-Zim Bog in MN. Years ago, someone put in draining ditches to drain the wetland and farm on the land. The land was not good for agriculture, so wetland restoration was implemented to return it to its nature form.

Within the Chesapeake Bay, he listed innovated finance programs within a government structure such as the VA Wetlands Banking and PA Revolving Fund Forest Protection. He believes the Chesapeake Bay has some of the most diverse opportunities to support and create these programs.

Tim broke down the structure of performance contracts and pay for success approach which are examples of traditional grants and contracts. Contractors are not paid for performance contracts until the construction is completed or until there are immediate outputs. Pay for success is looking for strong outputs from factors measured such as water quality at a site. Both forms of contracts require the contractor to upfront the money and wait a period of time to be paid back from those seeing the success. An example of pay for success is a stream restoration project on a private dairy cow farm in Cecil County, MD. Restoration practices on this site shows new ground coverings around the stream. Private capital supports the restoration project and construction, and once there are successful outputs, a government entity or non-profit organization such as the CBT pays back the investor.

He also provided an example of a different finance conservation strategy for nutrient banks in the watershed for VA. The first bank for nonpoint source trading was approved in 2008 and there are now 140 banks. State regulations required stormwater mitigation for new construction of one acre or greater. It operates on a phosphorus basis, and the total market is $15 million/year.

An example of private finance of endangered species and forest conservation is how in 2009 a private investor bought 33,000 acres, including occupied endangered species habitat for salamanders and separated species habitat from productive forests. They were then able to keep the conversation management operating from some funds from U.S. Fish and Wildlife Service and revenue from sustainable forestry operations.

Tim also discussed how to create buyers. He provided examples of how areas run by the Department of Defense are being impacted by climate change and how they are interested in mitigating these effects so that their buildings, technology, and training spaces are not destroyed. Tim also defined environmental outcomes as commodities. Environmental outcome could mean any of the following quantitative outcomes that can be directly measured or modified:

- Nitrogen load reduction
- Phosphorus load reduction
- Climate resiliency
- Carbon sequestration
- Algal bloom reduction

Tim then went into examples that involve equity. Montgomery County in MD use to have a stormwater contracting system that required three different contracts, but it was common to have disputes between the different contractors. In contrast, Prince George's County in MD uses a one contract approach to achieve a certain amount of credits of impervious surface treatments. The contractor would lead all the efforts, and the county would pay them back with each output.

Key points to take away for conservation finance:

- Need to consider demand first – who will buy?
- Where does the money come from at front, and where will the money come from to pay back?
- Government needs to behave consistently. If the behavior is not predictable, it is hard to get someone to invest.
    - Need way to transact carbon that satisfies regulators
    - Regulatory drivers reduce investment risk
- The Bay model defines outcomes, which allows investors to better figure out investment strategies.
- The natural commodity needs to have value to someone. In prior years, carbon had no value, but it is now a huge interest to investors.
- Bundling assets, e.g., water quality/nutrient reduction and carbon sequestration/wetlands, can entice investors since it reduces risk – multiple avenues to be paid back.
- Currency requires less than 5 – 10% of investment to track. It needs to be efficiently tracked even with the tradeoffs of uncertainty.
- Do not be the expert. Only a small amount of knowledge is necessary to communicate and work with those who are experts.

George Kelly, a practitioner, supplemented the presentation with the following notes:

- There is a lot of interest to invest, but one of the biggest issues is the lack of return.
- The mitigation market is so successful because it is regulatory in nature, and there are issues for noncompliance.
- Voluntary markets have higher risk to the investor.
- There are multiple types of market – offset, cap and trade, performance-based contract (still a little based on regulation).
- Metrics and currency are very important for the restoration and market analysis to make sure everything is based on the same criteria.
- Government buying and incentive framework is an area that needs to be considered more. It can provide a solution on the policy side. Example – VA state income tax credit.
- Performance based contracts can be significantly cheaper than grants – it considers efficiencies in the system in a cost-effective way.
- The restoration economy can support the creation of jobs. It does not need to be job security vs the environment.

Erik commented that he could not agree more on the points regarding developing a model that enjoys support as a credible measure of the carbon value of a type of project or action. The reason for lack of investment is risk of being labeled greenwashing for activities viewed skeptically by scientific community.

Erik ask Tim to talk more about the motivation across the private investors. Tim said some people want to make a lot of money and want to do something good with it. They are more likely to take a lot of risk. There are also tension funds that are not risk tolerate. They own a little bit of a variety of fields such as Nike or government bond funds. They want to invest in conservation finance because it is on a different risk cycle. They want to manage their portfolio to have different risks at different times. Another example of motivation is the track record of a conservation finance project. If a program continues to have a good or consistent rate of return, an investor may decide to invest in that program instead of the stock market. Another huge contributor is Philanthropy which is hoping to make a little bit of money, but they can also survive not making money. They are playing a large role in the beginning of stages where there are a lot of risks because they are more willing to take risks than a private investor. There are also companies that are investing to hopefully reduce a regulatory risk in the future. They have learned some valuable information in their process to invest in the current time period and scale it up in the future.

Erik asked if George could comment on the $20 billion on the sideline and where the money is coming from for investment. George said a large part is philanthropy, and the rest is for-profit. He thinks this is an understatement of the money available on the private side.

Kevin Du Bois commented that wetland mitigation is a zero-sum game though, so that does not result in any environmental improvement. With the lag to reach maturation, you might even argue that mitigation results in a loss of function and value over a certain timeframe. Julie followed up on this comment with a question on how to achieve these environmental results and how do you advance those results. Tim wanted to clarify statements he made previously because climate mitigation is different from wetland mitigation. In the context he was using mitigation, he was referring to compensatory mitigation which means in exchange for the harm on one site, there is a benefit somewhere else, and they are allowing a transaction to occur between the benefit and cost. An example of a wetland study related to compensatory mitigation is a study that found that sites over 10 acres in size had 75% of biodiversity in those pristine sites. If pristine wetland sites are getting destroyed, then there is something wrong with the process, but most of the wetlands destroyed are those next to shopping malls. George added Kevin's comment is relevant to the CRWG goal of adding wetlands and not concerned about no let loss. The no let loss approach is a market-based approach for driving finance. It is an example of how private finance has leveraged the restoration projects because of the regulatory dynamic. Also, the standards are set at the state for either no net loss, no let gain, etc. so one must understand how the state approaches the project.

Julie showed the finance coaches the spreadsheet on the CRWG finance strategy ideas (available on the calendar event page). George Kelly gave his initial thoughts on the Blue Carbon idea. George suggested getting the insight of those

who have been working on this topic for the past few years. He said the experts (i.e. Sarah Mack) were targeting marsh creation in the Louisiana coast, and then expanded the work to different finance approaches. They were very interested in having the credits available in the CA credit marketplace. With the question on what role will this workgroup play, George suggested converting the analysis already done and applying it to the Chesapeake Bay region. Tim stated the three best carbon assets in the Bay are submerged aquatic vegetation, oyster reefs, and wetlands/marsh creation. The transition from the bond to the regulatory approach would require an agreement on a standard to use for one of the assets while also getting a commitment from the states to prioritize those standards into state climate regulations. This would allow for a scientific approved process to be integrated into a regulatory process.

Sally liked the idea of expanding blue carbon to look across courses of carbon to see where best options are.

Nicole stated "Climate resiliency" was listed on one of the slides as an "Outcome" when talking about the need to define outcomes. She thinks there is still a lot of disagreement on what "climate resiliency" means and what a "climate resiliency" oriented project must entail in terms of adaptation benefits. What she is hearing is that it might be easier to define resilience from a mitigation perspective instead of resilience one such as reducing flooding. It also seems that mitigation is easier to approach because it is based on regulation more. George stated regulation is one way to drive market-based approaches, but people should also look at the current funding initiatives that come out of the government because there are still liberalities within it to decide how to spend the rest of the money. Tim agreed with Nicole that its harder for a climate resiliency project, but it is also newer so it will get there. For example, engineers today can do a pretty good job at estimating flood risks. He suggested to workshop this and put people in a room with a good facilitator to ask how they think a community would be measurably better off if “x” improvements were made. Flooding should have an economic effect so it could be measured by a numerical amount per inch of rainfall, for example. Erik stated the type of co-benefit one is looking for in a project may depend on the guidelines of that project.

Julie mentioned this is only the start of the finance conservation. An action item is for the CRWG Leadership to look at the notes from the meeting today and see if anything aligns with the CRWG Logic & Action Plan. Based on the topics that align with the Logic & Action Plan, Julie will reach out to the workgroup members on direction for these topics and get their input. The next step will be to reach out to the finance coaches to continue the conversation to move the finance strategies forward. A potential action item is to plan a future cross workgroup meeting with STAR since the SAV and Wetland Workgroups are also interested in this topic.

Tim provided this link that has a lot of overlap with these ideas on funding and financing water quality work with the same for climate resiliency.

http://policyinnovation.org/wp-content/uploads/2020/03/Strengthening-Urban-Rural-Connections_PDF.pdf

3:10 PM **SRS Update: Logic & Action Plan – Breck Sullivan (CRC)**

CRWG Leadership and staffers went over the 2018 – 2019 Logic & Action Plan to assess the status of each action item (red/yellow/green analysis). We will review the Logic & Action Plan with the workgroup members to determine whether we accurately reflected the status of each action.

Due to the enticing discussion for conservation finance, the Logic & Action Plan has been pushed. Please look out for an email on this topic or for a presentation at the September meeting.

3:25 PM **Wrap up**

Opportunity to share any additional announcements with the workgroup.

There were no other announcements mentioned at the meeting.

3:30 PM **Meeting Adjourn**

Next Meeting: September 21, 2020 1:30 – 3:30

Participants: Breck Sullivan, Cuiyin Wu, Julie Reichert-Nguyen, Timothy Male, Ann Phillips, Kevin Du Bois, Erik Meyers, Allison Breitenother, Cassandra Davis, Joel Carr, Kristin Saunders, Nicole Carlozo, Kate McClure, Matthew Konfirst, Mark Bennet, Sally Claggett, Ben McFarlane, Heidi Bonnaffon, John Deniston, Katheryn Barnhart, George Kelly, Darlene Finch, Gopal Bhatt, Taryn Sudol, Susan Julius, Melissa Deas, David Wood, Tanja Crk, Jackie Specht, Peter Tango