

Virginia Coastal Resilience Master Plan
Technical Advisory Committee – Economic Development Subcommittee

Subject	Economic Development Subcommittee Meeting #5 Virginia Coastal Resilience Master Planning Framework	Date	June 28, 2021
Facilitator	Sara Dunnigan	Time	2:30pm – 4:00pm
Location	WebEx - https://governor.virginia.gov/j/iayll	Scribe	Emily Sokol

Invitees/Attendees			
#	Name	Organization/Role	Attended?
Economic Development Subcommittee Members and Staff Advisors			
1.	Sara Dunnigan – Chair	Deputy Director, GO Virginia and Economic Development, Department of Housing and Community Development	Y
2.	John Bateman – Vice Chair	Regional Planner, Northern Neck Planning District Commission	
3.	Katie Sallee – Staff	Confidential Assistant to the Secretary of Natural Resources (Meryem Karad Assisted in Place of Katie)	Y
4.	Kate Gibson	Deputy Director, George Washington Regional Commission	
5.	Denise Nelson	Environmental Engineer, George Washington Regional Commission	
6.	Jennifer Morgan	GWRC	Y
7.	Dr. Troy Hartley	Director, Virginia Sea Grant	Y
8.	Robert W. Lazaro	Executive Director, Northern Virginia Regional Commission	
9.	Lewis L. Lawrence, III	Executive Director, Middle Peninsula Planning District Commission	Y
10.	Curtis Smith	Deputy Director, Middle Peninsula Planning District Commission	
11.	Stephen Moret	President & CEO, The Virginia Economic Development Partnership	
12.	Georgie Márquez	Principle, Andre Márquez Architects	
13.	Carol Considine	Program Head, Flooding and the Built Environment, Institute for Coastal Adaptation and Resilience at Old Dominion University	Y
14.	Dr. Robert Weiss	Director, Center for Coastal Studies at Virginia Tech	Y
15.	Greg Grootendorst	HRPDC	Y
16.	Todd Kilduff	Dewberry	Y
Scheduled Speakers			
16.	Leonard Nelson	CEO, NATRIX, INC	Y
17.	Caroline Whitehead	Dewberry	Y
Designated Alternates			
17.	Christy Morton	Alternate for Stephen Moret	Y
Subcommittee Advisors			
18.	Emily Steinhilber	Coordinator, Commonwealth Center for Recurrent Flooding Resiliency at Old Dominion University	Y
Other Participants			
19.	Ann Phillips	Rear Admiral, US Navy (Ret.) – Special Assistant to the Governor for Coastal Adaptation and Protection	Y
20.	Connor Winstead	VA Dept. of Conservation & Recreation	Y
21.	Matt Dalon	VA Dept. of Conservation & Recreation	Y
23.	Traci Munyan	Program Administrative Manager, Housing & Community Development	Y
24.	Lee Hutchinson		Y
25.	Pau Robinson		Y
26.	Matt Jones		Y
27.	Joseph Dennie		Y
29.	Keith Cannady		Y

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#	Name	Organization/Role	Attended?
30.	Katerina Oskarsson		Y
31.	Betsy Hnath		Y
32.	Grace Tucker		Y
33.	Margaret Rockwell		Y
Consultant Support			
35.	Johanna Greenspan-Johnston	Dewberry	Y
36.	Emily Sokol	Vision Planning and Consulting	Y

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1.	Roll Call and Quorum Affirmation	Sara Dunnigan called the meeting to order at 2:36 pm and took roll to establish a quorum. She advised that a quorum was present.
2.	Chapter 1289 Reading and Updates	<p>Meryem Karad read the required Section 1289 verbiage and asked for a motion to continue the meeting virtually. Dr. Troy Hartley motioned, and Jennifer Morgan seconded. Meryem conducted the vote, and the motion passed unanimously.</p> <p>Meryem advised all public attendees to insert questions in the chat box, which would be moderated by Meryem throughout the meeting. If a disruption occurs, please contact Meryem Karad at 804-786-0044.</p> <p>Sara advised that the Subcommittee would plan to hold in-person meetings beginning in July, based on announcements made during the TAC meeting. The Subcommittee is required to have a quorum at a physical location. Sara assured that the Subcommittee is getting close to finishing its work to support the TAC, so they are planning on in-person meetings for July, August, and potentially September.</p> <ul style="list-style-type: none"> - Jennifer Morgan: When is the next Subcommittee meeting? - Sara: We have been meeting the last Monday of every month. Obviously, this will become trickier as vacation schedules will conflict with in-person requirements. - Jennifer: Can we meet in Warsaw, as that would be a more central location for most of the Subcommittee members? - Sara: Yes, time and place is what we will need to discuss to make the meetings as feasible as possible for Subcommittee members.
3.	Stakeholder Survey Update	<p>Sara thanked all of the Subcommittee members for their assistance in developing the agenda for the meeting and building out and disseminating the stakeholder survey. Sara then discussed the results of the stakeholder survey. The survey received 31 responses, so Sara reviewed some of the high-level themes gained from the survey and provided a summary of the responses. She also discussed how her review of the responses sought to identify areas where there are high opportunity to make changes aligned with the master plan (See Attached Slides). Sara then opened the floor to the Subcommittee to voice their observations.</p> <p>Dr. Troy Hartley: There is an opportunity here to enhance awareness. When you look at the strengths and those principles aligning strongly with the master plan, economic</p>

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		<p>developers believe that they have the decision making tools to make alignment but not the best information from science, engineering, and design.</p> <p>Discussion Point- Carol Considine: Can we discuss the questions related to the second principle of “our economic development efforts are informed by the best available science, engineering, and design.”</p> <ul style="list-style-type: none"> - Sara: My biggest concern with this principle was the muddy in-between, as well as the relatively larger number of those strongly disagreeing with the principle. That is why I identified it as weak. - Carol: The problem here is that the science is clearer than the engineering and design response. There have been studies about the science and the impacts of the science. However, the engineering and design changes needed to accommodate the science have not yet been addressed or solidified. - Lewis: We have to be careful about how much reliance we put on that. If you look at economic development efforts in the residential space, you cannot build something unless it meets FEMA standards if it is in the floodplain. You may perceive there are better standards but by issuance of that permit, it is verifying that some standard has been met. - Carol: I agree, but the problem is that engineering and design codes are based on past climate. Yes, they have to meet FEMA standards, but those standards do not take into account sea level rise. There is a disconnect. - Lewis: How do you reconcile the difference between FEMA standards for building for storm surge, which can be 10 meters, compared to millimeters of sea level rise, which would then be inconsequential. - Carol: But in 50 years, that can have a significant impact. - Lewis: FEMA is always changing construction standards. It is going to be so very industry-specific. - Dr. Hartley: This is a scattered distribution from folks strongly agreeing to strongly disagreeing. There is something weird. You are probably right that we need to attend to it more. - Lewis: It probably also has to do with the way that the question is worded. The wording could be adding considerable confusion into the question, resulting in greater variability. - Sara: I am going back and looking back at my notes. As a Subcommittee, we had a lot of discussion about how to word this question. This Subcommittee thought adding aspects about engineering and design to this question was well-advised at the time; however, there is a lot in this question. - Robert Weiss (in chat): I am not sure that we can speak for those who answered the question and what they thought <p>Discussion Point- Dr. Hartley: Based on some of the comments you pointed out, the nature of the science they asked questions about was for economic and social science data, not projections of sea level rise.</p> <ul style="list-style-type: none"> - Sara: There was a willingness to build a case around what negative impacts would be experienced if nothing was done. They do not feel like they have the pitch. They want a quantifiable way to talk about coastal resilience to spark a motivation for change.

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		<ul style="list-style-type: none"> - Dr. Hartley: It is interesting that they want to know the negative impact of doing nothing since most do not want to know that or want to remain in the dark to avoid finding a need for change. - Sara: When I reviewed the data, the priorities of the plan were pretty well aligned, but the goals of the plan did not seem to connect with the respondents. <p>Discussion Point- Carol: When we talk about economic development, the respondents may not be looking to increase resilience, but they could be incorporating resilience designs as a result of a different motivation.</p> <ul style="list-style-type: none"> - Sara: There are some progressive communities that are doing this- applying coastal resilience techniques to enhance economic development. - Robert Weiss (in chat): Does this have to do with the misunderstanding what resilience vs sustainability is? - Sara: What is the difference? - Robert: Resilience is being able to recover from a state of degradation or decline back to your normal. Increasing resilience is a practice. Sustainability is the sum of your resiliency efforts- it speaks to the efforts you must accomplish to overcome future disasters. These concepts may be blurred and may confuse individuals. - Sara: That is helpful. Resilience is saying that bad things will happen, so we need to be prepared. Sustainability is saying that you have achieved a level at which your community is capable of bouncing back from future events. - Todd Kilduff: I agree. Resiliency is can you withstand one event. Sustainability is how often can you withstand that event. - Robert: That is a very good description. Sustainability is how many events can you withstand without going down a path you do not want to be on. - Dr. Hartley: The terms sustainability and sustainable development have been around for a while. How do we advance these principles and how has the economic development community reacted to that call? When receiving the call for greater resilience how will economic developers respond, based on how they responded to the call for sustainability. - Sara: I think the idea of resilience is appealing to economic developers because you are saying, "I am going to get knocked down, but I will get back up." Sustainability, how I perceive it, is about actions taken to mitigate and smarter strategies that can be used to sustain growth. There may need to be some education around this nuanced topic. I think resilience will be more enticing to economic developers, as they will likely link it to business continuity, developing strategies to minimize impacts of sea level rise, flooding, etc. - Christy: I think that is a great way to put it. When you talk about resiliency, we are currently talking about sea level rise, but economic developers have been learning a lot about resiliency in the past 16 months. They are learning how to be prepared and make it through difficult times. Economic developers want to make their communities more competitive, and resiliency is a part of that. Finding ways to be more resilient, having services that help your businesses, and being able to show prospects that your community is resilient is important and enticing. Any way that we as a group can help them with resources to become more resilient is great. When you look at sustainability, you think about different industry sectors

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		<p>like offshore wind, solar, and other sectors that VA has gone a long way in incentivizing to develop, which will help our communities be more sustainable.</p> <ul style="list-style-type: none"> - Robert: Your description of sustainability as a net positive is really great. You can also say sustainability is impossible without being resilient. This might be a helpful message going forward when relaying information to economic developers. - Sara: The desire is there. We are asking economic developers to align with the plan goals and priorities. It is important to understand how they measure their success, as this needs to be a mutually supportive relationship. <p>Discussion Point- Lewis: As long as insurance companies will write policies and banks will lend money, it does not really matter what the science says. People will live in hazard areas. It does not make it right or wrong, but people want to live in coastal areas. You will change behavior more easily by changing policies and setting limitations on insurance and banks, which drive business decisions.</p> <ul style="list-style-type: none"> - Sara: There were some comments in the survey about insurance. Also, there were not many specific industries mentioned, but agriculture was mentioned a few times. The amount of economic activity happening in the agricultural sector in coastal regions needs to be recognized. When you talk about alignment, it would be helpful to look at economic activity in the study area and see if there are clusters or patterns. We have 31 responses right now, do we want to do one more boost for the survey? - The Subcommittee responded: yes, that the survey should remain open to receive responses - Sara: I will look at the list of respondents and see where we got the majority of them. From there, we can determine who to reach out to and what perspectives might be helpful. - Lewis: are all of these answers coming from one geographic quadrant, or are they coming from all over the Bay? - Sara: Are you volunteering to help me do a geographic analysis? - Lewie: I was just asking if you received information about what localities they represent. - Sara: Yes, we included questions on the survey that allowed them to identify their localities and jurisdictions. - Jennifer: I will volunteer to help you analyze the geographic distribution of the respondents. - Sara: Great, I will provide you with a list of the respondents - Greg Grootendorst: I would be happy to reach out to people in Hampton Roads to garner more survey responses, if that will help. - Sara: I will be sending out the original distribution list so that we do not send the survey to people that have already completed it. We will try to boost our response rate. Could you see this being the framework of a report? We will be recommending a framework for alignment, so the key findings and recommendations would be about 1-2 pages. - Robert: A report sounds great. We could we also make comment about the best available science. To reiterate Carol's previous comment, not everything that is defined by science is translated into engineering and design.

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		<ul style="list-style-type: none"> - Carol: For the question that we believe is asking too many different things, should we separate those into two different questions, or will that mess up the results so much that it will impact our ability to use them? - Sara: Personally, I think those would be different questions, and we would not be able to combine the results from the new respondents in a way that would maintain the integrity of the responses. We could reach out to those original respondents to clarify with a couple of follow-up questions, if we choose to split up the question going forward. <p>Discussion Point- Troy: Who does the email come from? I have not seen the distribution of the survey.</p> <ul style="list-style-type: none"> - Sara: It was not sent to the committee, as you would not be a respondent. We had state, regional, and local individuals who administered economic development programs responding to the survey. We talked as a group about having others (intermediaries) respond as well. I will circulate the link to the Subcommittee. The best thing we could do is share the survey to any individuals in our networks that fit that description. - Troy: I was not looking to volunteer to fill out the survey. I just want to help disseminate it. - Sara: Rear Admiral Ann Phillips, John Bateman, and I have sent it out to a variety of groups in our networks. I will make sure that the survey gets circulated to the Subcommittee again. I will send you the opening email that Rear Admiral Phillips sent to everyone. - Troy: That is perfect. - Sara: We will have to reflect on those areas where we have some disorganized data and figure out what it means. It could mean that it is an area for education and could be best addressed by building a narrative.
4.	Lewie Lawrence, Middle Peninsula Planning District Commission – Economic Development Alignment Case Study	<p>Sara then introduced and opened the floor to Subcommittee member, Lewis Lawrence, to give his presentation.</p> <p>Lewis: Middle Peninsula began to take action about 5 years ago, creating programs and solutions in the flood resiliency space that had not been envisioned before. Middle Peninsula is looking to become the most resilient region on the western seaboard. My commission accepted the idea of water being an asset, not a liability, but how do you leverage programs based on this ideal? 1) GO Virginia Grant, which looks to bring academic and regional resiliency research and living laboratories to Virginia. 2) Fight the Flood Program, which operates in 3 tiered environments: educate the community about living in a space with hazards and teaching them about solutions; addressing the “I don’t know who to call” problem by aggregating companies that can bring their virtual footprint and professional flood mitigation services to our community members (2 dozen companies so far); and bring loan and grant funding into that environment to make the money flow. If you do not make money flow, you are not building anything or making progress in this space. Vertically aligning these companies and backstopping with grants programs has proved to be an asset for us and providing access to funding and professional help makes us a one-stop shop for developing coastal resilience projects. It is flood mitigation through a structured program, creating the holistic ability for any person with a flood mitigation</p>

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		<p>problem to make better decisions, get help and support faster, and grow businesses. We are creating an environment for companies to make this transition from virtual footprint to brick and mortar shop, which required us to figure out a way to incentivize them to come to Virginia. NATRX is one of those companies. Everything Virginia has done for coastal resilience is mostly reliant on nature-based solutions based on sand, plants, and rocks. However, the definition of nature-based solutions is much larger than that. In doing so, we are bringing solutions to the marketplace that provide consumers with options. The NATRX solution might be cheaper than the living shoreline option, so we are driving prices down by allowing innovation to enter the marketplace. I will turn it over to Leonard to allow him to talk about that.</p>
5.	<p>Leonard Nelson, CEO NATRX, INC - Economic Development Alignment Case Study</p>	<p>Lewis then turned the floor over to Leonard Nelson, CEO of NATRX, INC.</p> <p>Leonard Nelson described how nature-based solutions, when designed and applied appropriately, can allow you to do more with less. If businesses can perform these solutions at a large scale and at a lower cost, they can contribute to and disrupt the marketplace. He identified one of the main challenges of selling coastal resilience products as the fact that it can be bewildering for a business or individual to buy a resilience product: how do they know what to buy, are they overpaying, etc. He described how NATRX offers an advanced manufacturing technique with a 3D printing capability (RISE Mobile Production Unit), as well as how his business sought to find and use all available funding resources. He gave a description about what has worked for them financially, and what has been challenging. (See Attached Slides)</p>
6.	<p>Next Steps Discussion and Next Meeting</p>	<p>Sara thanked Lewis and Leonard for their time and presentations, emphasizing how exciting their work was and how similar technology may be applied effectively in the DHCD space. Sara advised the Subcommittee that, based on their current meeting schedule, the next Subcommittee would take place on July 26th. She asked the Subcommittee whether there would be any major conflicts?</p> <ul style="list-style-type: none"> - Jennifer: I have a meeting in Warsaw that day that I believe you also will be attending. - Sara: Then we will send out a Doodle poll to establish the day and venue of the next meeting. Our next meeting will reflect upon the development of a framework for aligning economic development with the master plan. Since we will be travelling, I think it would be helpful to have a 2-hour meeting / working session so that we can create a draft of our recommendations in time for them to be incorporated into Dewberry’s draft. - Carol: If the meeting will be in Warsaw, we will need to have a clarification on the Doodle poll to ensure we know who can be there in-person and who can be there only virtually. - Lewis: There are some hefty requirements about meeting virtually. If you elect to be virtual, there are some requirements as far as what is considered a justifiable excuse. - Meryem: We do need quorum, which is 6 people for this Subcommittee. If you need to be virtual, there are restrictions as to what constitutes you needing to be virtual. As long as we have a meeting space that can accommodate our needs, as well as a quorum, I believe we will be able to work through that.

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		<ul style="list-style-type: none"> - Dr. Hartley (in chat): I am out of state that day. The Finance Committee meetings that also meet final Monday of the month, may be meeting on the 26th - Sara: It looks like the 26th might not be a great day to meet, as the Finance Subcommittee meets that morning. I am neutral on location but finding something central would be optimal. We will plan for a longer meeting to make the travel worth our time and get a draft of a framework for alignment together. I am thinking about how it would be structured to be actionable for those developing the master plan itself. - Robert Weiss (in chat): I will be participating online, given where I am located
7.	Public Comment Period	Meryem reported that there were no public comments submitted at that time, and no individuals had signed up for public comment for the meeting.
8.	Wrap-Up and Adjourn	Sara asked for a motion to adjourn the meeting. Greg moved, and Lewis seconded. Sara conducted the verbal vote, and the motion passed unanimously. Sara adjourned the meeting at 4:20 pm.

Action Items			
#	Action Item	Owner (Organization)	Due Date
1.	Send out Doodle Poll to establish date and time of July Subcommittee meeting	Subcommittee Chairs and Staff	TBD

If you have any questions, please contact Emily Sokol, Vision Planning and Consulting, at esokol@vision-pc.net.