

Virginia Coastal Resilience Technical Advisory Committee (TAC) Project Prioritization 2024 Q1 Subcommittee Meeting Minutes

Subject	TAC PP Subcommittee Meeting 2024-Q1	Date	02/15/24
Chair	Marcus Thornton, Deputy Chief Data Officer, ODGA (Co-Chair)	Time – START/ADJOURN	10:00am/11:45am
Location	VITA 7325 Beaufont Springs Drive Richmond, VA 23225	Scribe	Sarah Jackson VCU CPP

Subcommittee Members

Title [Alternate Title] Organization (Abbreviation)	Name [Alternate Name]	Attended? V = Virtual / R = Registered
Chief Data Officer Deputy Chief Data Officer Office of Data Governance and Analytics (ODGA)	Ken Pfeil, Chair [Marcus Thornton], Co-Chair	V [Y]
Coastal Planner Accomack-Northampton Planning District Commission	Kellen Singleton	V
Flood Planning Director American Flood Coalition	Jack Krolikowski	V
Executive Director [Director of Environment, Economic Development, & Housing] Crater Planning District Commission (Crater PDC)	Jay Ellington [Andrew Franzysheh]	[Y]
Chief Resilience Officer [Principal Water Resources Engineer] Hampton Roads Planning District Commission (HRPDC)	Ben McFarlane [Whitney Katchmark]	[V]
Environmental Planner Northern Neck Planning District Commission (NNPDC)	Brianna Heath	
Planning Manager, Environment Program [Resilience Planner] Plan RVA (PlanRVA)	Sarah Stewart [Eli Podyma]	[Y]
Director [Chief Deputy Director] Virginia Department of Conservation and Recreation (DCR)	Matt Wells [Andrew Smith]	[Y]

Title [Alternate Title] Organization (Abbreviation)	Name [Alternate Name]	Attended? V = Virtual / R = Registered
Environmental Division Director [Assistant Division Director] Virginia Department of Transportation (VDOT)	Chris Swanson [Christopher Berg]	V
Commissioner [Director of Coastal Policy, Restoration and Resilience] [Chief of Habitat Management] Virginia Marine Resources Commission (VRMC)	Jamie Green [Rachel Peabody] [Randy Owen]	
Chief Development and Public Affairs Officer [Director of Environmental Policy and Compliance] Virginia Port Authority (VPA)	Cathie Vick [Scott Whitehurst]	[V]
Executive Director [Policy Program Director] Wetlands Watch (Wetlands Watch)	Mary-Carson Stiff [Ian Blair]	V

DCR Staff and Other Participants

Name	Title (Organization Abbreviation)	Attended? V = Virtual
Matt Dalon	Resilience Planning Program Manager, DCR	Y
Carolyn Heaps-Pecaro	Resilience Planning Program Coordinator, DCR	Y
Sarah Jackson	Consultant, Virginia Commonwealth University Center for Public Policy (CPP)	Y
Wheeler Wood	Consultant, Virginia Commonwealth University Center for Public Policy (CPP)	Y
Brian Batten	Consultant, Dewberry	Y
Johanna Greenspan-Johnston	Consultant, Dewberry	Y

Reference Links	
Item	Link
Meeting Agenda	https://townhall.virginia.gov/L/GetFile.cfm?File=meeting\49\39103\Agenda_DCR_39103_v2.pdf
Meeting Handouts/Presentation Slides	https://www.dcr.virginia.gov/crmp/meeting/document/2024q1-tac-project-prioritization-handouts.pdf
Video Recording of the Meeting	https://youtu.be/kynrCa8SqVU

Agenda Item	Minutes
<p>1. Call to Order, Roll Call, Introductions 10:00 am</p>	<p>Co-Chair Marcus Thornton called the meeting to order at 10:00 AM. Members took attendance, the meeting agenda was adopted, and the Q4 subcommittee meeting minutes were adopted.</p>
<p>2. Presentation by DCR 10:05 am</p>	<p>Ms. Carolyn Heaps-Pecaro (DCR) reviewed the subcommittee objectives and schedule. She reminded the subcommittee that the CRMP Phase II is a place-specific plan that incorporates all major flood hazards. Ms. Heaps-Pecaro shared the following updates:</p> <ul style="list-style-type: none"> • Discussion of planned resilience actions and future plans will continue into the next Q2 meeting. • DCR contract with Dewberry for flood hazard data, impact assessment, end user survey analysis, web explorer update mock-up is in progress. • DCR is actively hiring a consultant to support additional work on plan that would include projects and initiatives analysis, financial tools and information, outreach and engagement, final report development, and web explorer updates.
<p>3. Old Business</p>	<p>End-User Survey Update</p> <p>Carolyn Heaps-Pecaro (DCR) reminded the subcommittee that the goal of the End-User Survey was to understand how respondents use the Coastal Web Explorer and barriers they encounter to funding. 49 total responses were received, 41 from desired users. Of these responses, 6 state agencies, 8 coastal Planning District Commissions (PDCs), and 18 local governments were represented. She presented the following key takeaways from the survey responses:</p> <ul style="list-style-type: none"> • Overall, many respondents use the Coastal Web Explorer and felt that the tool was useful. Open Data Downloads were the least used feature. • More than 30% of respondents reported not using the data previously. Some acknowledged that the data was too specific to coastal flooding. Yet respondents generally saw more opportunities to address flood resilience in the Commonwealth. Very few respondents reported that the current products were insufficient to meet their needs. • Many respondents reported that the Hazards information was most useful, with impacts perceived as the second most useful. Several comments expressed that there needs to be more visibility into the data that is driving results. Projects and initiatives were rated among the least used, with comments indicating that while respondents would like to share knowledge about projects, they don't think the plan/products currently meet that need. • When asked "<i>How can Phase I products be used?</i>", the most popular case products were grant seeking, planning development, program and operations decisions, public education and awareness, and research. These responses were consistent with earlier survey results. • When state agencies were asked "<i>How does your agency plan to use the plan?</i>", public education and awareness, program and operations decisions, and research were the most common responses.

	<p>Ms. Heaps-Pecaro pointed out the following opportunities for improvement that could be addressed by Project Prioritization subcommittee:</p> <ul style="list-style-type: none">• There was a clear need for the Impact Assessment to include impacts from all forms of flooding, and not just coastal.• Respondents also suggested communicating flood impact more in terms of dollar amounts and including information about flood insurance coverage and gaps in the Coastal Web Explorer.• Improving access to data behind the impact assessment through the Coastal Web Explorer and Open Data Downloads was also cited as important. <p>No subcommittee discussion or comment followed this presentation.</p> <p>Coastal Resilience Master Plan, Phase II – Impact Assessment</p> <p>Ms. Heaps-Pecaro provided an update on the Phase II Impact Assessment Process. Her presentation highlighted the following information:</p> <ul style="list-style-type: none">• Dewberry is putting together a list of assets and adding new datasets, documenting decisions about which data is being used while reviewing methodology and including input from stakeholders about an updated approach.• Dewberry will work on these elements through April. They will calculate impacts and data summary from March through July before incorporating qualitative data and input until September. A separate contextual data analysis will occur between August and December that will communicate key data and incorporate these stories into the plan. There will be more opportunities for the subcommittee to provide input throughout this process. <p>Johanna Greenspan-Johnston, Senior Resilience Planner at Dewberry, shared the changes from Phase I to Phase II. Her presentation highlighted the following key takeaways:</p> <ul style="list-style-type: none">• The goal of the impact assessment is to revisit phase I data and methods, expand flood hazard types to rain-fall driven, pluvial, as well as rainfall flooding. Additionally, Dewberry is expanding impact indicators and updating data sources to be able to share more types of data products.• Data updates to Phase II will include more restructuring data types including new hazard information and quality control process to help expand understanding of vulnerability and risk, as well as summarizing across types of geography.• Asset Data will expand to key categories that include community resources and asset-based information that relates to people, population, and residential structures (built, human, and natural infrastructure). Dewberry will align efforts with VDEM’s CISA approach.• Hazard Data will be used to focus on understanding coastal flooding – such as high-tide and water lines as well as extreme coastal storms. Multi-frequency flood data will also be available. A new edition will be rainfall induced and pluvial flooding. This will provide understanding of different sizes and how they will change overtime. While the riverine side won’t
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	<p>include the same detailed level, Dewberry will leverage FEMA floodplain zones to still look at multi-frequency but not across the whole study area.</p> <ul style="list-style-type: none">• Phase II will offer understanding of different types of flood hazards and how they look across a range of conditions, including the effects on assets such as neighborhoods, houses, and economics in respect to infrastructure (built, human, natural).• Phase II will take into account the various contexts when looking at hazards and assets. For example, social vulnerability, community resources/capacity that tell us about social and environmental contexts and how that impacts overall understanding of consequences for communities will be considered.• Three different hazard types will be examined: coastal, precipitation, and riverine. Dewberry will look at changes across event probability and planning horizons – existing, near, and far future. Lower and higher bounds will be identified, which was not previously done. Future conditions will only be projected for coastal and precipitation flood projects, not riverine at this time.• Impacts will be broken into different levels of detail based on the information available. For example, hazard model and asset location will tell us about exposure, asset characteristics about vulnerability (semi-quantitative consequences), and understanding risk will predict financial consequences (quantitative assessment).• Presented an example of exposure v. risk: an estimated 150% increase in flood-exposed residences between 2020 and 2080 and an estimated 1,230% increase in annualized flood damages to residential structures between 2020 and 2080 will allow us to understand depth and structural characteristics. These characteristics then tell us about financial consequences.• While narrative and exposure across all flood types will be understood with the information available, can only predict vulnerability and risk for some assets as the level of detail will vary across categories based on available information.• Dewberry will use threshold-based approach to understanding impacts. And a reviewed process for assessing loss of habitat.• Dewberry is currently looking at federally and state recognized tribal boundaries to get an understanding of how much land will be lost and the structural damages relating to that land.• Cultural resource preservation index, nature based recreational access, developmental vulnerability model, and watershed impact model will all be used. Dewberry is Looking for input on what might be missing. <p>Feedback and Questions from Subcommittee:</p> <ul style="list-style-type: none">• Whitney Katchmark (HRPDC) asked whether the population displacement and inundated acres are permanent and if they also include riverine or rainfall events that are temporary. Ms. Greenspan-Johnston responded that any “exposure” metrics would include riverine and rainfall driven events, but that measures of vulnerability like population displacement and land lost would only include permanent inundation from coastal flood sources
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	<p>with MHW as the threshold for determining uninhabitability/loss of function.</p> <ul style="list-style-type: none">• Carolyn Heaps-Pecaro (DCR) added that DCR is currently speaking with tribes about the impact assessment and are actively working to get their feedback on whether the proposed approach is the right way to measure impact for their lands and structures. DCR will work to incorporate their feedback.• Jack Krolkowski (AFC) asked how Dewberry is thinking about average annualized losses and how they are normalizing those for the community. He cited the percentage of assets at risk as one example. Ms. Greenspan-Johnston said they are producing data in a way that this can be done. The key thing, she said, is knowing what processes are running because when they know the total number of assets and structures in a given area, they can be sure not to overvalue high-valued areas. She provided assurance that all content will be there to make these adjustments. <p>Ms. Greenspan-Johnston (Dewberry) continued the presentation on the Phase II Impact Assessment approach. She highlighted the following key points:</p> <ul style="list-style-type: none">• To assess built infrastructure, Dewberry will look across different critical infrastructure sectors using the HIFLD data source. This will allow for understanding assets related to broadband, substances, and control act facilities. Bus stations have also been added, as well as a bigger focus on evacuation routes. Septic systems supply was included last time as a major impact yet are more often privately owned. Public water systems lack clarity. Dewberry is looking for more input on what specific asset data should be included in analysis.• Carolyn Heaps-Pecaro (DCR) added that methods from grouping these assets follow what VDEM has developed in their new Critical Infrastructure working group- the kick-off meeting will happen later this month. She said DCR is ultimately looking to this group for guidance and leadership in defining critical infrastructure and identifying corresponding asset data, though given the timing of the group's kick-off, there are constraints for how much guidance it will be able to provide for this plan.<ul style="list-style-type: none">○ Whitney Katchmark (HRPDC) asked if they can elaborate on who is participating in the VDEM work group. Ms. Heaps-Pecaro replied that to her knowledge, currently it is only state government agencies and other large CI owners (ex., utility providers). No local governments involved at this time. <p>Subcommittee comments and discussion further explored the inclusion of septic systems:</p> <ul style="list-style-type: none">• Ms. Katchmark (HRPDC) continued by asking if they are looking for better data sources for septic systems and public water supply. Mr. Matt Dalon clarified that for septic systems in Phase I, VDH provided geolocated by residential address data for known septic systems. Want to avoid duplicating work; know that VIMS is doing septic exposure/vulnerability to sea-level rise work. Don't propose that we ignore septic impacts in Phase II;
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	<p>still speak to it. Right now, DCR needs to know from stakeholders whether additional analysis on septic or public water supply is needed, or if it will be duplicative work of existing analyses.</p> <ul style="list-style-type: none">• Ms. Katchmark (HRPDC) asked whether the subcommittee has an update on what VIMS is doing in this area. Last time she heard from VIMS, she would have suggested that their work would not meet their needs.<ul style="list-style-type: none">○ Matt Dalon (DCR) said he is working with Molly at VIMS to get an update on the waste water vulnerability viewer. He knows this started in the Middle Peninsula with the goal of expanding across the coastal zone. Ms. Heaps-Pecaro (DCR) confirmed that they have not received an update from VIMS yet but that they will look into it in time for the next subcommittee meeting.○ Mary-Carson Stiff (WW) clarified that the septic project is different than the marsh migration project. She agreed that having an update on the septic work underway would be helpful.○ Whitney Katchmark (HRPDC) said that a thorough description of VIMS data is needed to know assumptions built into their analysis.• Whitney Katchmark (HRPDC) mentioned that it is odd not to go to DEQ for public water supply information.<ul style="list-style-type: none">○ Matt Dalon (DCR) said public water supply locations from VDH are sent to DCR every six months. Ms. Katchmark replied that water systems have to submit federal reports on vulnerability that could answer questions about how you define what is at risk; could be another source of information.○ Both Ms. Heaps-Pecaro and Mr. Dalon said DCR will look to highlight that work as part of what's already been done. <p>Ms. Greenspan-Johnston (Dewberry) continued the presentation on the Phase II Impact Assessment approach. She highlighted the following key points:</p> <ul style="list-style-type: none">• New Human Infrastructure sources include public refrigerated warehouses, shelters, supplemental colleges, and FDIC insured banks.• For Natural Infrastructure, Dewberry is looking at other ways to classify and categorize based on previous studies. Considering a non-hierarchical approach but will need to accept that some duplication of assets might appear. These will be presented separately.• For the community context, Dewberry is looking at social vulnerability and flood hazard to identify high risk areas without the most infrastructure. The downscaled method doesn't capture differences in racial demographic data, raising the question of whether to continue with this approach or the alternative CDC SVI approach used in CFPF and FEMA NRI. Census tract boundaries have changed since 2020, making some areas difficult to compare. <p>Feedback and Discussion from Subcommittee:</p> <ul style="list-style-type: none">• Carolyn Heaps-Pecaro (DCR) added that in either community context option, they would still be doing a cross-section of coastal hazard and vulnerability data which would be new to this plan. She reiterated that the
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	<p>question is <i>how</i> to do this. DCR has received feedback that consistency with the CFPF approach is important.</p> <ul style="list-style-type: none">• Matt Dalon (DCR) added that they are trying to get beyond available information. He asked whether raster data was helpful from phase I. <i>Do we want to update or produce something at a larger scale to help convey the risk?</i> He explained that they used a 5-by-5 grid to show the matrix of coastal hazard and vulnerability, but this can be changed to 3x3 or some other grid size.• Whitney Katchmark (HRPDC) said that if granular data is used, we can learn where vulnerability is, whereas a higher level clarifies where you are most eligible to qualify for funding. For this reason, she said, some of the higher scale data leads to just checking off a box.<ul style="list-style-type: none">○ Mr. Dalon added that DCR and the funding subcommittee are also looking at other sources to help provide more context to where federal and state is directing money and to what scale.• Mary-Carson Stiff (WW) said she agrees with Ms. Katchmark’s statement. She said that if the TAC Funding Subcommittee is already looking at whether users have access to the right tools, then this subcommittee should shift focus to as granular as possible. The higher-level data is not needed as it’s available elsewhere. The goal should be to get as specific and localized as possible. She agreed that reducing the number of squares in the matrix grid for simplicity is a good suggestion as it may be more likely to be used if there are fewer options.• Ms. Stiff added that asking for locality support for confirming/validating data is important, but that it may be a tall order to ask communities to provide this information, requiring separate funding and some compensation to local staff and PDCs. Being representative of each region may not be possible in the end as some will participate and others won’t.<ul style="list-style-type: none">○ Mr. Dalon (DCR) agreed that getting the validation done in time for this plan may not be possible. This could be done after the analysis. Validation could occur at the start of implementation.• Jack Krolikowski (AFC) agreed with the previous comments. He added that the subcommittee needs to be thoughtful about what raster cell is shown in the lower end because, at a macro-level, it is still exposed to flooding. He reminded everyone that this is a self-selected exposed group that is exposed. Therefore, we need to be specific that even the least at risk of this group is still high risk. This message must be conveyed that ranking is relevant but doesn’t mean that anyone here is at zero risk. <p>Ms. Greenspan-Johnston (Dewberry) concluded the presentation by sharing Dewberry’s next steps in the impact assessment timeline. These will include a finalized look at assets and compiling phase II database over the next month. She said that hazard data is ready to go and will be executed and summarized through June. At this point, Dewberry is looking for more validation and review.</p> <p>Carolyn Heaps-Pecaro summarized the main discussion points as:</p>
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	<ol style="list-style-type: none"> 1) needing more information on septic systems and what VIMS has already done to determine whether DCR needs to do a separate analysis. 2) If subcommittee has more feedback on asset data, please let DCR know as they are moving ahead with impact assessment so we need input as soon as possible.
<p>4. New Business</p>	<p>Coastal Resilience Master Plan, Phase II – Projects and Initiatives Update</p> <p>Carolyn Heaps-Pecaro (DCR) presented projects and initiatives data and how these have been collected thus far:</p> <ul style="list-style-type: none"> • Phase I in August 2022 requested info from PDCs and localities. This was repeated again in August 2023, resulting in 6 PDCs submitting updates that were included in the Coastal Web Explorer. • DCR launched the new user portal for the Coastal Web Explorer that allows projects to be updated and edited. Deadline to get projects in or let DCR know if you need help, is April 1st 2024. • Currently, there are 660 projects/initiatives in the Coastal Web Explorer—this includes phase I and what DCR has received since then. Projects were submitted from PDCs, cities, counties, and towns. • There are gaps in coverage of areas that don’t have coastal flood issues—DCR hopes to close this gap as they shift towards including more non-coastal hazards in this next phase. • Another gap is the need for state government agencies and tribal governments to share their work in the Coastal Web Explorer. • The subcommittee should take into consideration that some projects are more complex and costly than others, as many projects and initiatives are missing implementation costs. • Some of the reported challenges of phase I included a short time frame for data call, limited responses, inconsistently defined project details and footprints, and the gaps analysis being limited to coastal impact. <p>Ms. Heaps-Pecaro (DCR) Reviewed Phase I subcommittee recommendations and acknowledged that while phase II can’t address all of these recommendations, they can make progress towards addressing some underlying concerns. She shared that the next step will be filling gaps in inventory with consultant support. Ms. Heaps-Pecaro then asked the subcommittee to consider what is missing in presented analysis before next meeting. For example, <i>should phase II include examples of projects and initiatives? If so, how should they be selected and incorporated into the plan?</i></p> <p>Feedback and Discussion from Subcommittee:</p> <ul style="list-style-type: none"> • Mary-Carson Stiff (WW) cited the subcommittee recommendation of “Providing guidance on type and location of projects that will advance Commonwealth’s flood resilience goals”, noting that this work is critical and the subcommittee has done this enough. She said that TAC members can be most useful by discerning how to synthesize what we’ve learned into recommendations for moving forward. She asked whether this is something the contractors will do or if the subcommittees will inform and create these

	<p>recommendations? She added that the subcommittee has received lots of information from DCR but it’s time now to present recommendations. The subcommittee needs a working session to just discuss recommendations, based on the information shared, in order to fulfill our objectives.</p> <ul style="list-style-type: none"> • Ms. Heaps-Pecaro (DCR) said the next meeting will include an update from the contractor about what information has been gathered in terms of projects & initiatives (an update with some analysis), along with time for a collaborative brainstorming session. • Ms. Stiff (WW) said she was concerned the subcommittee won’t have the dedicated time needed if the full meeting agenda does not focus solely on recommendations. She recalled that the process during the last TAC did not give enough time to focus on recommendations, therefore the group was rushed. This ultimately led to weaker recommendations. • Whitney Katchmark (HRPDC) agreed and added that the subcommittee has not yet looked at the index of flood risk and social vulnerability and identified where there are no projects. The subcommittee also needs to discuss existing projects and determine whether they are the right fit. These are two important discussion areas. Ms. Heaps-Pecaro shared that a preliminary gaps analysis will be shared with the subcommittee, and agreed that time will be tight, but DCR’s plan is to spend the next three meetings devoted to recommendations. • Ms. Stiff (WW) said this will be helpful and agreed with Ms. Katchmark’s key areas to discuss.
<p>5. Public Comment 11:40 am</p>	<p>Emily Steinhilber of the Environmental Defense Fund alerted the subcommittee facilitators that the chat feature in the Zoom is disabled. Participants who wanted to comment must select the “raise hand” button in Zoom to comment during the meeting. Ms. Steinhilber supported earlier comments about the importance of including time for robust discussion on the recommendations and subcommittee topics. She agreed that previous timelines have been rushed.</p>
<p>6. Action Items 11:41 am</p>	<p>Identified action items are:</p> <ul style="list-style-type: none"> • Subcommittee members will review Phase I recommendations handout and End-User Survey results prior to the next meeting. • DCR will get an update from VIMS on septic system analysis and provide this to the TAC subcommittee for consideration. <p>The topic for the Q2 2024 meeting will be subcommittee recommendations. Full TAC meeting will be on March 13, 2024 in-person at the Patrick Henry Building in Richmond.</p>
<p>7. Adjourn 11:49 am</p>	<p>The meeting was adjourned at 11:49 am.</p>

The purpose of these minutes is to record and preserve, to the best of our ability, the major contributors and general topics covered during this meeting. Verbatim transcription is not the intent of this document. If you have any questions, please contact flood.resilience@dcr.virginia.gov
