## Virginia Coastal Resilience Technical Advisory Committee (TAC)

| Subject  | TAC Meeting 2024-Q1                 | Date          | 03/13/2024            |
|----------|-------------------------------------|---------------|-----------------------|
| Chair    | DCR Director Matt Wells             | Time –        | 1:00pm-3:33pm         |
|          |                                     | START/ADJOURN |                       |
| Location | Hybrid: Patrick Henry Building East | Scribe        | Addie Alexander (CPP) |
|          | Reading Room / Virtual              |               |                       |

| TAC Members                                                          |                              |             |
|----------------------------------------------------------------------|------------------------------|-------------|
| Name                                                                 | Title                        | Attended    |
| [Alternate Name]                                                     | [Alternate Title]            | V = Virtual |
|                                                                      | Organization (Abbreviation)  |             |
| Secretary of Natural and Historic Resources/Chief Resilience Officer | Travis Voyles                |             |
| [Director of the Department of Conservation and Recreation (DCR)]    | [Matthew Wells]              | [Y]         |
| [Chief Deputy Director, DCR]                                         | [Andrew Smith]               | [Y]         |
| Coastal Planner                                                      | Kellen Singleton             |             |
| Accomack-Northampton Planning District Commission (A-NPDC)           |                              |             |
| Flood Planning Director                                              | Jack Krolikowski             | [V]         |
| American Flood Coalition (AFC)                                       |                              |             |
| Chief                                                                | Chief Stephen Adkins         |             |
| Chickahominy Indian Tribe                                            |                              |             |
| Chief                                                                | Chief Gerald A. Stewart      |             |
| Chickahominy Tribe Eastern Division                                  |                              |             |
| Executive Director                                                   | Jay Ellington                | Y           |
| [Director of Environment, Economic Development, & Housing]           | [Andrew Franzyshen]          |             |
| Crater Planning District Commission (Crater PDC)                     | , ,                          |             |
| Executive Director                                                   | Charles P. Boyles, II        |             |
| [Environmental Planner II]                                           | [Meredith Keppel]            | [Y]         |
| George Washington Regional Commission (GWRC)                         |                              |             |
| Chief Resilience Officer                                             | Ben McFarlane                | Υ           |
| [Principal Water Resources Engineer]                                 | [Whitney Katchmark]          |             |
| Hampton Roads Planning District Commission (HRPDC)                   |                              |             |
| Executive Director                                                   | Lewis L. Lawrence, III       | Υ           |
| [Deputy Director]                                                    | [Curtis Smith]               | [V]         |
| Middle Peninsula Planning District Commission (MPPDC)                |                              |             |
| Chief                                                                | Chief Kenneth Branham        |             |
| Monacan Indian Nation                                                |                              |             |
| Environmental Program Coordinator                                    | Cameron Bruce                | Υ           |
| Nansemond Indian Nation                                              |                              |             |
| Environmental Planner                                                | Brianna Heath                |             |
| Northern Neck Planning District Commission (NNPDC)                   |                              |             |
| Director of Environment and Resiliency Planning                      | Norm Goulet                  | Y           |
| [Coastal Zone Program Manager]                                       | [Rebecca Murphy]             |             |
| Northern Virginia Regional Commission (NVRC)                         |                              |             |
| Chief Data Officer                                                   | Ken Pfeil                    |             |
| Deputy Chief Data Officer                                            | [Marcus Thornton] –          |             |
| Office of Data Governance and Analytics (ODGA)                       | [Chris Burroughs] for Marcus | [Y]         |
| Chief Diversity, Opportunity, and Inclusion Officer                  | Martin Brown                 |             |
| [Deputy Chief Diversity Officer]                                     | [Michael Perez]              | [Y]         |
| Office of Diversity, Opportunity and Inclusion (ODOI)                |                              |             |

| Name                                                                                          | Title                       | Attended     |
|-----------------------------------------------------------------------------------------------|-----------------------------|--------------|
| [Alternate Name]                                                                              | [Alternate Title]           | V = Virtua   |
| [Aiternate Name]                                                                              | Organization (Abbreviation) | V - VII tuai |
| Director of the Institute for Coastal Adaptation and Resilience                               | Dr. Jessica Whitehead       | Y            |
| [Director of Applied Projects, CCRFR]                                                         | [Carol Considine]           | '            |
| Old Dominion University – Institute for Coastal Adaptation and                                | [Carol Considine]           |              |
| Resilience (ODU ICAR)                                                                         |                             |              |
| Chief                                                                                         | Chief Robert Gray           |              |
| Pamunkey Indian Tribe                                                                         | Chief Robert Gray           |              |
| Planning Manager, Environment Program [Resilience Planner]                                    | Sarah Stewart               |              |
| PlanRVA                                                                                       | [Eli Podyma]                | [Y]          |
| Chief                                                                                         | Chief G Anne Richardson     | [1]          |
| Rappahannock Indian Tribe                                                                     | Chief G Affile Nicharusun   |              |
| Director, Volgenau Virginia Coastal Reserve                                                   | Jill Bieri                  | V            |
|                                                                                               | JIII DIEI I                 | v            |
| The Nature Conservancy (TNC) Commander                                                        | Colonal Prian D. Hallbara   |              |
|                                                                                               | Colonel Brian P. Hallberg   |              |
| Deputy Chief, Water Resources Division  LLS Army Corps of Engineers, Novfolk District (USACE) | [Greggory Williams]         |              |
| U.S. Army Corps of Engineers, Norfolk District (USACE)                                        | Dr. Karan McClathan         | Y            |
| Director of the Environmental Institute                                                       | Dr. Karen McGlathery        | Y            |
| University of Virginia, Environmental Institute (UVA – EI)                                    | Paggia Tunnangs             |              |
| Tribal Administrator                                                                          | Reggie Tupponce             |              |
| Upper Mattaponi Indian Tribe                                                                  | 14 11 24 11                 |              |
| Executive Vice President, Public Policy and Government Relations                              | Keith Martin                |              |
| [Vice President for Public Policy and Legislative Affairs]                                    | [Kristin Burhop]            | 5.0          |
| [Manager Of Public Policy]                                                                    | [Ethan Betterton]           | [Y]          |
| Virginia Chamber of Commerce                                                                  |                             |              |
| Director, Grant Management and Recovery Division                                              | Robert Coates               | Y            |
| [State Hazard Mitigation Officer]                                                             | [Debra Messmer]             |              |
| Virginia Department of Emergency Management (VDEM)                                            |                             |              |
| Chief Deputy                                                                                  | Alexander Samms             | Y            |
| [Manager of the Office of Wetlands and Stream Protection]                                     | [Dave Davis]                | [Y]          |
| Virginia Department of Environmental Quality (DEQ)                                            |                             |              |
| Assistant Director                                                                            | William Curtis              | Υ            |
| Virginia Department of Housing and Community Development                                      |                             |              |
| (DHCD)                                                                                        |                             |              |
| Environmental Division Director                                                               | Chris Swanson               |              |
| [Assistant Division Director]                                                                 | [Christopher Berg]          | [Y]          |
| Virginia Department of Transportation (VDOT)                                                  |                             |              |
| Senior Vice President Governmental Relations                                                  | Martha Moore                |              |
| [Legislative Specialist, Governmental Relations]                                              | [Katelyn Jordan]            | [Y]          |
| Virginia Farm Bureau (VAFB)                                                                   |                             |              |
| Associate Dean for Research and Advisory Services                                             | Mark Luckenbach             | Υ            |
| [Assistant Professor]                                                                         | [Molly Mitchell]            |              |
| [Associate Director for Advisory Services]                                                    | [Lyle Varnell]              |              |
| Virginia Institute of Marine Science (VIMS)                                                   |                             |              |
| President & CEO                                                                               | Brett Vassey                | Υ            |
| Virginia Manufacturers Association (VMA)                                                      |                             |              |

| TAC Members                                                           |                             |             |
|-----------------------------------------------------------------------|-----------------------------|-------------|
| Name                                                                  | Title                       | Attended    |
| [Alternate Name]                                                      | [Alternate Title]           | V = Virtual |
|                                                                       | Organization (Abbreviation) |             |
| Commissioner                                                          | Jamie Green                 |             |
| [Director of Coastal Policy, Restoration and Resilience]              | [Rachael Peabody]           |             |
| [Chief of Habitat Management]                                         | [Khadiijah Payne]           |             |
| [Environmental Engineer]                                              | [Claire Gorman]             |             |
| Virginia Marine Resources Commission (VMRC)                           |                             |             |
| Chief Development and Public Affairs Officer                          | Cathie Vick                 |             |
| [Director of Environmental Policy and Compliance]                     | [Scott Whitehurst]          | [V]         |
| Virginia Port Authority (VPA)                                         |                             |             |
| Executive Director                                                    | Shawn Crumlish              |             |
| [Director of Program Management]                                      | [Peter D'Alema]             | [Y]         |
| Virginia Resources Authority (VRA)                                    |                             |             |
| Director                                                              | Dr. Troy Hartley            | Y           |
| Virginia Sea Grant                                                    |                             |             |
| Director, Coastal Collaborator (effective 4/1/2024)                   | Wendy Stout                 | Υ           |
| [Executive Director, Fralin Life Sciences Institute]                  | [Robin McCarley]            |             |
| Virginia Tech (VT – CCS)                                              |                             |             |
| Acting Director                                                       | G. Michael Fitch, Ph.D.     | Y           |
| Virginia Transportation Research Council (VTRC)                       |                             |             |
| Executive Director                                                    | Mary-Carson Stiff           | V           |
| [Policy Program Director]                                             | [lan Blair]                 |             |
| Wetlands Watch                                                        |                             |             |
| Asst. Provost for Coastal Resilience/Director of the Virginia Coastal | Thomas Ruppert              | Υ           |
| Resilience Collaborative                                              |                             |             |
| Virginia Coastal Resilience Collaborative (W&M)                       |                             |             |

| TAC Advisors  |                                            |          |
|---------------|--------------------------------------------|----------|
| Name          | Title                                      | Attended |
|               | Organization (Abbreviation)                |          |
| Joseph Howell | Regional Community Plans & Liaison Officer | V        |
|               | Navy Region Mid-Atlantic (Navy)            |          |

| TAC Staff            |                                                                             |          |
|----------------------|-----------------------------------------------------------------------------|----------|
| Name                 | Title (Organization Abbreviation)                                           | Attended |
| Matt Dalon           | Resilience Planning Program Manager, DCR                                    | Y        |
| Carolyn Heaps-Pecaro | Resilience Planning Program Coordinator, DCR                                | Υ        |
| Addie Alexander      | Consultant, Virginia Commonwealth University Center for Public Policy (CPP) | V        |
| Wheeler Wood         | Consultant, Virginia Commonwealth University Center for Public Policy (CPP) | Υ        |

| Reference Links |                                                                        |
|-----------------|------------------------------------------------------------------------|
| Item            | Link                                                                   |
| Meeting Agenda  | https://townhall.virginia.gov/L/GetFile.cfm?File=meeting\49\39308\Agen |
|                 | da_DCR_new_v1.pdf                                                      |

| Meeting Handouts/Presentation  | https://www.dcr.virginia.gov/crmp/meeting/document/2024q1-tac- |
|--------------------------------|----------------------------------------------------------------|
| Slide                          | meeting-materials-final.pdf                                    |
| Video Recording of the Meeting | To be included with final minutes.                             |
| Additional Links:              |                                                                |

| Agenda Item                                                   | Minutes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. Call to Order, Roll<br>Call, and Introductions             | Director Matt Wells (DCR) called the meeting to order at 1:00 p.m. He had all members introduce themselves. He announced the sign-in sheet for public comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 2. Adoption of<br>Meeting Agenda                              | A motion was made and seconded to adopt the meeting agenda. It passed unanimously.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| 3. Adoption of<br>Meeting Minutes from<br>December 15th, 2023 | A motion was made and seconded to adopt the meeting minutes. All members voted to adopt.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| 4. Reports from DCR                                           | Director Wells (DCR) provided a legislative update.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                               | <ul> <li>HB1458 came out of the Resilience Coordination Working Group, which resulted in 28 recommendations.</li> <li>Strengthens multi-hazard Chief Resilience Officer position and repositions it within a "hub and spoke" formation, with the CRO as the hub and the agencies as spokes.</li> <li>Stands up interagency resilience management team to facilitate ongoing conversations amongst agencies who will meet regularly to share best practices and coordinate their work.</li> <li>Increases transparency around the Resilient Virginia Revolving Fund and the Community Flood Preparedness Fund.</li> <li>Establishes a new technical advisory committee to facilitate Virginia Flood Protection Master Plan. The current TAC is focused on the CRMP (coast). When this group sunsets, the broader statewide TAC will come together around the update to the statewide plan.</li> <li>This bill is currently on the Governor's desk.</li> </ul> |  |
|                                                               | Update on flood funds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|                                                               | <ul> <li>Resilient Virginia Revolving Fund is re-opened. Applications can be submitted through the end of June.</li> <li>Community Flood Preparedness Fund: DCR received applications, offered \$85 million in grants and loans, and will announce awards soon.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                                                               | Update on the plans                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                               | <ul> <li>DCR has signed contracts with 4 teams (AECOM, Arcadis, Dewberry, and<br/>Stantec ) for the next 3 years with an option to extend to 5 years.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |

 Their work will include the coastal resilience master plan, coastal resilience web explorer, Virginia Flood Protection Master Plan and outreach for flood resilience planning.

There is an open position for a resilience planner at DCR which should be filled shortly.

Lewie Lawrence (MPPDC) made a comment to highlight that the recommendations and findings identified in the Coastal Resilience Master Plan should be reflected by the ways in which DCR evaluates projects for funding under the CFPF. How will this be addressed moving forward?

Director Wells shared that it is DCR's intention to look for opportunities for this alignment for future grant/loan rounds, to the degree that it is possible given that the CRMP is focused on the coast and the funds are available statewide.

Matt Dalon, Office of Resilience Program Manager at DCR, provided an update on Virginia Coastal Resilience Master Plan, Phase II. The update included:

#### Overview of CRMP Phase II development

- Major deliverables, components and key elements of the plan.
- Allocation of workload between Dewberry's existing contract and new contract(s) with additional consultants.
- An updated timeline for plan development.
  - Staff noted that some of these items carry forward beyond plan deadline; additional supplemental materials and outreach may be developed after the plan is complete.

#### **End User Survey Results Summary**

- End user survey results are available as a PDF and will be posted to DCR's website.
- Reviewed respondents: All PDCs and half of the local jurisdictions responded, as well as some tribal feedback and other stakeholders
- Discussed findings and next steps:
  - Use cases for CRMP and data include grant seeking, plan development, operational decisions, public education and awareness.
  - Biggest funding desire is access to grants. DCR and funding subcommittee see opportunity to provide additional tools to make case for financial tools other than grants.
  - The survey also asked about barriers to funding/financing flood resilience:
    - Lack of capacity—people, money, and training
  - O The Web Explorer and PDF plan document are the most used products. Data is less used, so getting that data in people's hands is an area of focus.

# 5. Reports from TAC Subcommittees

#### Research, Data, and Innovation Subcommittee

Alex Samms (DEQ), Subcommittee Chair, reviewed subcommittee objectives and reported on the subcommittee decisions.

- Looked at NOAA sea level rise data, as well as RCPs, and discussed scenarios and frameworks.
- Subcommittee members had a lot of discussion on combining different types of flooding and what the best method is to look at all hazards together
- Multiple stakeholders are involved in a complex data landscape. The subcommittee will look to survey results to help shape what the data should look like.
- Stakeholder training is necessary to support people with how to use the data and for what purposes.
- Discussed that in any given year, we may see more or less flooding than what is shown in the models, which use average flooding. Need a guide to understand the data.
- Also engaged the Fathom data evaluation team to help provide guidance on planning scenarios.

#### Matt Dalon (DCR) added several updates:

- Phase I used only coastal flood hazard/sea level rise data. Time horizons were set 20 year intervals, and selected based on NOAA 2017 SLR curve. There were limits in terms of presenting uncertainty and variability.
- For Phase II, decided to use three planning scenarios broken into moderate risk tolerance and low-risk tolerance to better reflect uncertainty. Ex., low-risk tolerance could be used for decisions related to critical infrastructure. Seeing a range of possibilities within each time frame is the goal.
- Another driving factor is that new pluvial data and FEMA fluvial data for Phase II doesn't line up with the coastal timeframes from Phase I.
- There is no perfect solution, but the solution the group chooses needs to be well communicated.
- On the coastal side, the subcommittee discussed which NOAA projections to use; they decided to use the 2080 values for the far future time frame, which track more closely to the 2022 NOAA projections (released since Phase I plan).
- On the pluvial side, subcommittee looked at different confidence interval values, which weren't very different. The Fathom team recommended using the 90th percentile to accurately reflect the intention behind having a "low risk tolerance".
- On the fluvial side, FEMA data is all that's available so that will be used.

Lewie (MPPDC) asked about how this data is talked about. Increasing challenges of coastal flooding have been ongoing in rural communities for years. Talking about this data only in terms of future scenarios doesn't acknowledge the existing conditions of low-lying areas. More should be done to represent severity of existing conditions.

Matt Dalon (DCR) responded that this is great feedback for how the plan tells the story of this data and issues that underserved communities are dealing with today.

Ben McFarlane (HRPDC) suggested updating the "existing conditions" baseline scenario to reflect how bad things already are. Atlas 14 is already below what planners are currently seeing in Hampton Roads. On the other hand, 2017 NOAA curves are high compared to what they're seeing. For existing conditions we shouldn't use a projection curve, but rather data on what's happening. Additionally, it would be helpful to compare today against the recent past. 2000 could be used as the baseline. An assessment of how much worse things have gotten is important.

Additional feedback will be solicited on these planning horizons, though the subcommittee is on a short timeline. Matt Dalon (DCR) asked for input as soon as possible as a decision will be made by the end of the month.

Brett Vassey (VMA) asked at what intervals these data projections are compared to real-world data. Matt Dalon said that happens in the VIMS report card that looks at tide gauges comparing current values with projections. There is a lot of variability in upper values. 2017 projects were more conservative, with estimated projections on the high level, so they have pushed those out further. This process is conducted every 5 years so it will be revisited and updated based on current data.

Brett asked if impervious and pervious surfaces were analyzed over time. Matt responded that there is land cover data over time, and this project is looking at Chesapeake Bay Conservancy data to see the makeup of land use cover in different jurisdictions.

Mark Luckenbach (VIMS) suggested that if data is incomplete, case studies could be used where data is more accurate to show impacts.

Mary-Carson Stiff (Wetlands Watch) commented that there is data on impervious surfaces in flood plains by VIMS CCRM to help local governments receive open space credits. Norm Goulet (NVRC) and Mary-Carson expressed support for what Ben said about Atlas 14. With MARISA data, DCR wouldn't need to run their data, they could run MARISA data to be more up-to-date. Norm agreed and added that they are looking at modeling for the Occoquan watershed, which is affected by season changes.

Troy Hartley (Virginia Sea Grant) commented that these scenarios need to be grounded in human impacts, including economic, cultural, social, justice, etc. Case studies could highlight hotspots to guide resources to those places.

Jessica Whitehead (ODU) commented on the limits of monitoring and evaluation. Are we making sure that we're not just focused on projects but collecting and stewarding data for future updates of the plan? We need to understand which projects are working and which wants aren't and refocus accordingly.

Ben McFarlane (HRPDC) suggested talking about what data gaps are. Where the data or tools don't exist, the plan needs to point to where there are gaps and insufficient data to help the state move in the direction of getting better data and models. For example, some FEMA maps are very old and that's a problem. We need to call attention to that.

Meredith Keppel (GWRC) added that from the end-user perspective, it's important to have consistency. Could be useful to keep data in line with the Chesapeake Bay Agreement so the average user can understand and compare it to information with which they are already familiar.

#### **Project Prioritization Subcommittee**

Presented by Chris Burroughs (ODGA), who was filling in for the Committee Chair and Co-Chair.

- The subcommittee received a report from Dewberry on Phase 1 data and methods, and reviewed and provided feedback on several areas of asset data, including septic, water supply, and social vulnerability.
- Carolyn Heaps-Pecaro (DCR) reviewed elements of the subcommittee's
  work related to the planned resilience actions analysis, which included an
  initial review of the status of the work and discussion for how the projects
  & initiatives would be analyzed and presented in the plan.

Carolyn (DCR) shared an update on the impact assessments and planned resilience actions analysis:

- 1. Impact assessment:
  - a. Reviewed the timeline for the impact assessment development.
     Emphasized that the current work is to develop a list of assets and asset data inputs, and to define the methodology by which impacts to those assets will be calculated.
  - b. Asset dataset compilation is in progress, has been reviewed with subcommittee. A few copies were made available of the latest iteration at the meeting and will be distributed to members via email.
  - c. Methodology for impact assessment is also in progress. Has not yet been reviewed by members but will be sent out next week to

members of the Project Prioritization Subcommittee for feedback. Any other members wishing to receive a copy should contact Carolyn Heaps-Pecaro.

Lewie (MPPDC) shared feedback that DCR should look at marinas, campgrounds, and restaurants that have septic departments. It's taking health departments years to process permits. There is a huge negative economic impact that drives people away from entrepreneurship in Virginia.

Carolyn (DCR) responded that financial impacts like those will fall under the risk piece, which is the hardest element to assess. It may not be possible to get quantitative data everywhere to be able to build this type of financial/economic analysis for this plan. However, this is an opportunity to showcase through case studies and qualitative data collection these types of stories.

Ben McFarlane (HRPDC) asked whether this list has been coordinated with VDEM. Carolyn shared that this was shared with VDEM's critical infrastructure working group at its kick-off meeting in February to identify critical infrastructure assets. DCR has been coordinating with Robbie and other VDEM staff on datasets they manage.

DCR reiterated that it is relying on existing datasets, and not creating any new datasets for this plan. Any additional datasets (must be existing) can be incorporated before March 27.

- 2. Planned resilience actions analysis
  - a. Reviewed process/timeline for developing this element of the plan. So far, emphasis has been on building the inventory of projects and initiatives, but beginning in April will begin reviewing and filling data gaps.
  - b. The deadline is April 1 to submit projects or requests for support.

Jess Whitehead (ODU) asked about what guidance is being given to localities to make sure their actions are comprehensive, including not just physical projects but also policies such as changing to zoning or land use plans. Carolyn responded that DCR has a one-pager that they shared with PDCs to clarify what counts as a project vs. initiative, and how policies, plans, or studies fit in. They are also working to answer those questions when talking with local stakeholders to clarify that they aren't just looking for construction projects.

• In terms of building the inventory, Carolyn (DCR) shared a map of projects and initiatives owned by local governments that illustrates costs, which shows disparities across regions. Some areas have no cost information. Few projects and initiatives in the Web Explorer are owned by state agencies and none are owned by tribal governments. In addition, many projects are missing cost information. These gaps will be addressed in the next step.

 Planned resilience actions assessment will be informed by feedback from the subcommittee.

Meredith Keppel (GWRC): would love to see increased collaboration between workforce development and using a cost-benefit analysis, drawing information from Troy and Lewie. Economic opportunities for innovation around this are needed. We need innovation around septic challenges, for example. Addressing the problems can also present opportunities for economic development.

#### **Funding Subcommittee**

Peter D'Alema (VRA) shared that the funding subcommittee met on February 1. They looked at peer states with resilience plans to look at funding objectives for state planners.

- Targeting vulnerable communities
- Identifying co-benefits to engage broad stakeholders
- Using metrics tied to desired outcomes to track and support progress
- They looked at Louisiana, Texas, and Florida
- Validated where Virginia is headed in terms of the subcommittee's objectives; Virginia is relatively early in the process but making headway.
   Louisiana and Texas are several years into their resilience planning process
- Louisiana has accessed federal funding well to get projects completed. They
  have an agency that builds projects on a state level
  - o they focus on how avoid loss and structural damage
- Texas does a good job of identifying projects and costs, similar to the Virginia effort, and is focused on:
  - Focused on economic drivers in different regions and impacts of failing to make resilience improvements
  - Focus on funding and identifying specific funding sources
- Florida has also done a good job of identifying projects and needs
- The subcommittee also distributed a survey to learn about the knowledge in the group of funding sources

Matt Dalon (DCR) shared an update on the survey results and financial information plan

- Four lines of effort
  - 1. Building financial baseline
  - 2. Making the financial case and telling compelling stories
  - 3. Documenting opportunities for state support
  - 4. Providing guidance and information
- O Results from survey of subcommittee members will be used to identify next steps for product development. Survey included 26 potential products across four lines of effort. DCR has worked to consider feasibility of these products and timing of their development. Top results when considering both subcommittee votes and feasibility assessment are:

- a. Where are state and federal funds going–geographic analysis of where the need is and where the money is going
- b. Local financial capacity
- c. Establishing natural infrastructure baseline assessment
- d. DCR needs to quantify impacts in terms of cost, property tax, land value, as well as indirect impacts, like the effect of a business shutting down because of flooding of their building.
- e. Co-benefits also need to be lifted, including benefits outside of just flood resilience.
- f. Financial training and technical support for accessing and implementing federal funding
- g. Financial planning, possibly as part of the statewide plan that's focused on policies and programs
- h. Scaling financial programs, like "fight the flood," that could be shared with other localities or scaled up
- i. Financing tool sheets ranked highest, which needs to be Virginia-specific. What would requirements and use cases be?
- j. More guidance is needed on how to leverage state and federal funding, including timing.

#### **Outreach and Coordination Subcommittee**

Michael Perez (ODOI) shared recent meeting topics, including reviewing strategy goals, providing feedback on strategy implementation, and the need to develop additional recommendations.

 Subcommittee feedback was provided on topics of presenting results from flood impact participatory mapping, coordination opportunities for meetings with the USACE (Hampton Roads Peninsula CSRM study, underserved community meetings), and continual engagement of federal partners.

Carolyn (DCR) provided an update on DCR's outreach and engagement activities since the subcommittee's meeting. Outreach and engagement strategy for this plan was presented at the last TAC meeting. Presentation included status of activities identified in that strategy. Highlights included:

- VDEM kicked off critical infrastructure working group, which DCR participated in
- Participatory mapping
  - DCR has rolled out a new flood story app
  - Anyone can add info on flood impacts at a particular location including photos, frequency, and more
  - O This will be useful for statewide plan and other flood resilience efforts
  - There are other tools like this, which we hope to coordinate with in the future
- Underserved community meetings
  - O Bringing on board new contractors to help with this task

|                 | O Looking at how to define underserved communities in a way that                                                                                                                                                               |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | <ul> <li>Looking at how to define underserved communities in a way that includes flood risk</li> </ul>                                                                                                                         |
|                 | O End date is August 24th                                                                                                                                                                                                      |
|                 | C Lift date is August 24th                                                                                                                                                                                                     |
| 6. Old Business | Matt Dalon (DCR) shared an update on selecting data to use for the Virginia Flood Protection Master Plan.                                                                                                                      |
|                 | Overview of the plan: This plan is for state agencies and how the policies                                                                                                                                                     |
|                 | and programs that exist within the state address policies. One element is a flood impact summary (where flooding occurs). The plan is due at the end of next year, updates on a 5-year cycle. The plan is envisioned to be one |
|                 | piece of an integrated planning process (statewide -> regional -> local)                                                                                                                                                       |
|                 | <ul> <li>Challenges with statewide flood hazard data: Gaps in data include a lack of</li> </ul>                                                                                                                                |
|                 | consistent statewide data coverage and a lack of data on future conditions.  State plan's flood hazard data will be used for: identify focal areas for state                                                                   |
|                 | agencies based on severity of impacts; this is not designed to replace                                                                                                                                                         |
|                 | existing datasets.                                                                                                                                                                                                             |
|                 | <ul> <li>Existing flood hazard data exists from multiple sources with differing levels of detail. More data will be released in the coming years, but this will not be available in time to include in the VFPMP.</li> </ul>   |
|                 | Subcommittee feedback on data development has included:                                                                                                                                                                        |
|                 | <ul> <li>There needs to be a long-term data development plan; this would</li> </ul>                                                                                                                                            |
|                 | be a great recommendation, though is not feasible to get it done for the statewide plan                                                                                                                                        |
|                 | <ul> <li>keeping land use data updated and current</li> </ul>                                                                                                                                                                  |
|                 | <ul> <li>Option for VFPMP flood hazard data considered: Fathom third-party data.</li> </ul>                                                                                                                                    |
|                 | o includes coastal, pluvial, and fluvial, available at 10-meter                                                                                                                                                                |
|                 | o includes current and future conditions                                                                                                                                                                                       |
|                 | o DCR formed an evaluation team made up of experts/practitioners                                                                                                                                                               |
|                 | from various state agencies, universities, PDCs. Has been evaluating if this data is suitable for statewide flood protection planning. They                                                                                    |
|                 | found that it's suitable for the statewide plan for right now, but not                                                                                                                                                         |
|                 | for regulatory purposes. It's also not a long-term solution.                                                                                                                                                                   |
|                 | O DCR also spoke to NOAA about the use of third-party flood hazard data. NOAA is concerned with forward-looking data that                                                                                                      |
|                 | downscales climate data.                                                                                                                                                                                                       |
|                 | <ul> <li>Another consideration addressed is data accessibility. Evaluation<br/>committee advised that data should be accessible to end users.</li> </ul>                                                                       |
|                 | Question for the TAC: what level of accessibility is needed?                                                                                                                                                                   |
|                 | Figures and images will be in the report and will be                                                                                                                                                                           |
|                 | available to everyone. There are a lot of other levels of                                                                                                                                                                      |
|                 | products (from derivative, to detailed). DCR needs input on                                                                                                                                                                    |
|                 | who needs access to which level of data availability.                                                                                                                                                                          |
|                 | <ul> <li>DCR noted that the data is good enough for purposes of use<br/>for VFPMP, but that it may not be suitable for site-level</li> </ul>                                                                                   |
|                 | Tot virivir, but that it may not be suitable for site-level                                                                                                                                                                    |

design or other more detailed use cases. Do not want to encourage misuse of the data.

DCR is looking for stakeholder buy-in before making decisions.

#### TAC Feedback and Discussion:

Mark Luckenbach (VIMS) shared that they have a process where people have to request to download their data. Having an approval process could be one way to have a middle option between making data available and encouraging appropriate use. Matt Dalon shared that yes, there could be a middle option. Have to choose if DCR wants to purchase the data outright, or purchase a license.

Wendy Stout (VT) suggested that the state could put a disclaimer on the data, and include guidance and transparency on the data. Licensing of the data is a good idea.

Karen McGlathery (UVA) suggested that having a request for approval is going to be a barrier, so having licensed data that people can use is the way things are going and what DCR should do.

Thomas Rupert (W&M) reiterated that private data is not a long-term solution. Data should be publicly sourced and publicly available.

Lewie (MPPDC) also added that other state agencies require licensing agreements, which can come with fees and draconian controls, which dissuade people from using the data. This should be avoided.

Jess Whitehead (ODU) added that a disclaimer saying what the data should or shouldn't be used for is helpful. The biggest concern is that if there's a location that comes up as being at lower risk than it is, could lead to badly informed decisions.

Ben McFarlane (HRPDC) shared that this is a stopgap and there is better data on the horizon.

#### 7. New Business

#### **Subcommittee Recommendations**

- Matt Dalon (DCR) summarized the roadmap for the remaining 3 subcommittee meetings. The contractor will help facilitate this process, building on feedback so far and end-user survey results.
  - Q2 subcommittees will draft recommendations leading up to the next meeting
    - If TAC members need any information from DCR to form recommendations, let the DCR staff know.
    - the next round of subcommittee meetings will be scheduled for late April/ Early May
  - Q3 will be about revising the recommendations
  - By the Q4 meeting, recommendations will be in final draft form for final review.

#### **TAC Member Updates**

Robbie Coates (VDEM) shared an update on the STORM FY 24 application update

| 9. Adjourn        | Director Wells adjourned the meeting at 3:33pm.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8. Public Comment | No public comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                   | <ul> <li>Regional plans don't have people designated to implement them.</li> <li>Ben encourages the TAC and DCR to rethink how the regional plans are designed in future iterations, perhaps working with PDCs to take more ownership of those plans so they don't just sit on the shelf.</li> </ul>                                                                                                                                                                                                                                                                                                                                                    |
|                   | Ben McFarlane (HRPDC) commented on the disconnect between the Coastal Resilience Master Plan and the Community Flood Preparedness Fund. As we create the Flood Protection Master Plan, it would be good to think about connections between plans and funds to ensure that the plans are implementable. More frequent updates to the plan products would be helpful, particularly on project developments. Examples of this exist in the transportation sphere which can be drawn from. This helps with funding proposals at the state level.                                                                                                            |
|                   | <ul> <li>Virginia was selected to receive \$6.2 million</li> <li>Requires the utilization of a revolving loan fund</li> <li>Virginia will use STORM funding to offset the cost of BRIC/ FMA funding</li> <li>Virginia opened the application for these grant programs in the Summer.</li> <li>Currently gauging interest for businesses in these loan funds</li> <li>Potential projects submitted so far include big projects. Looking for STORM funds to cover the non-federal share.</li> <li>This year STORM funds available are over \$100 million</li> <li>Applications are due in April</li> <li>There will be a public comment period</li> </ul> |

### **Voting Records**

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 <a href="mailto:flood.resilience@dcr.virginia.gov">flood.resilience@dcr.virginia.gov</a>