

Virginia Coastal Resilience Technical Advisory Committee (TAC)

Subject	TAC Meeting 2022-Q3	Date	9/16/22
Chair	SNHR/CRO Travis Voyles delegated to DCR Director Matt Wells	Time	10:30am
Location	Henry Patrick Building, East Reading Room, 1111 East Broad Street, Richmond, VA 23219	Scribe	Dr. Lydia Bienlien

TAC Members		
Name [Alternate Name]	Title [Alternate Title] Organization (Abbreviation)	Attended? V = Virtual
Chief Stephen Adkins	Chief Chickahominy Indian Tribe (Chickahominy)	
Chief Keith F. Anderson	Chief Nansemond Indian Nation (Nansemond)	
Elizabeth Andrews	Director of the Virginia Coastal Policy Center William & Mary School of Law (W&M)	Y
Dr. Rosa Atkins [Michael Perez]	Chief Diversity, Opportunity, and Inclusion Officer [Special Assistant] Office of Diversity, Opportunity, and Inclusion (ODOI)	
John Bateman	Senior Regional Planner Northern Neck Planning District Commission (NNPDC)	Y
Chip Boyles	Executive Director Greater Washington Regional Commission (GWRC)	
Chief Kenneth Branham	Chief Monacan Indian Nation (Monacan)	
Evan Branosky [Dave Davis]	Chief Stormwater Policy Advisor [Manager of the Office of Wetlands and Stream Protection] Virginia Department of Environmental Quality (DEQ)	Y
Shawn Crumlish	Executive Director Virginia Resources Authority (VRA)	Y
Bill Curtis	Assistant Director Virginia Department of Housing and Community Development (DHCD)	Y
Michael Fitch	Acting Director Virginia Transportation Research Council (VTRC)	Y
Norm Goulet [Rebecca Murphy]	Director of NVRC's Environment and Resiliency Planning [Coastal Zone Program Manager] Northern Virginia Regional Commission (NVRC)	Y
Chief Robert Gray	Chief Pamunkey Indian Tribe (Pamunkey)	
Jamie Green [Randy Owen]	Commissioner [Chief of Habitat Management] Virginia Marine Resources Commission (VMRC)	Y

Colonel Brian P. Hallberg [Gregg Williams]	Commander [Deputy Chief, Water Resources Division] U.S. Army Corps of Engineers, Norfolk District (USACE)	Y
Dr. Troy Hartley	Director Virginia Sea Grant (Sea Grant)	Y
Whitney Katchmark [Ben McFarlane]	Principal Water Resources Engineer [Senior Regional Planner] Hampton Roads Planning District Commission (HRPDC)	Y
Lewie Lawrence [Curtis Smith]	Executive Director [Deputy Director] Middle Peninsula Planning District Commission (MPPDC)	
Dr. Mark Luckenbach	Associate Dean for Research and Advisory Services Virginia Institute of Marine Science (VIMS)	Y
Dr. Karen McGlathery	Director of the Environmental Resilience Institute University of Virginia (UVA)	Y
Dr. Lydia Patton [Jay Ruffa]	Interim Executive Director [Director of Planning & GIS] Crater Planning District Commission (CraterPDC)	Y
Ken Pfeil [Marcus Thornton]	Chief Data Officer [Deputy Chief Data Officer] Office of Data Governance and Analytics (ODGA)	
Chief G Anne Richardson	Chief Rappahannock Indian Tribe (Rappahannock)	
Jessica Steelman	Coastal Planner Accomack-Northampton Planning District Commission (A-NPDC)	Y
Chief Gerald A. Stewart	Chief Chickahominy Tribe Eastern Division (Chickahominy-ED)	
Sarah Stewart	Planning Manager Environment Program, PlanRVA (PlanRVA)	Y
Erin Sutton	Chief Deputy State Coordinator Virginia Department of Emergency Management (VDEM)	Y
Chris Swanson [Chris Berg]	Environmental Division Director [Assistant Division Director] Virginia Department of Transportation (VDOT)	Y
Reggie Tupponce	Tribal Administrator Upper Mattaponi Indian Tribe (Upper Mattaponi)	
Travis Voyles	Secretary of Natural and Historic Resources, Chief Resilience Officer (SNHR/CRO)	Y
Dr. Robert Weiss	Director of the Center for Coastal Studies Virginia Tech (VT)	Y
Matt Wells (Chair)	Director Virginia Department of Conservation and Recreation (DCR)	Y
Dr. Jessica Whitehead [Carol Considine]	Director of the Institute for Coastal Adaptation and Resilience [Director of Applied Projects, CCRFR] Old Dominion University (ODU)	Y
Vacant	Special Assistant to the Governor for Coastal Adaptation and Protection (SACAP)	

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

TAC Staff		
Name	Title (Organization Abbreviation)	Attended? V = Virtual
Dr. Lydia Bienlien	Virginia Sea Grant Fellow (DCR)	Y
Derrick Bollen	Special Assistant (DCR)	Y
Matt Dalon	Resilience Planning Program Manager (DCR)	Y
Darryl Glover	Deputy Director for Dam Safety, Floodplain Management, and Soil & Water Conservation (DCR)	Y
Wendy Howard-Cooper	Division Director of Dam Safety & Floodplain Management (DCR)	Y
Corey Scott	Assistant Secretary of Natural and Historic Resources (SNHR)	Y
Andrew Smith	Deputy Director (DCR)	Y

Attendees		
Name (In-Person)	Name (Virtual)	Name (Virtual)
Sabine Rogers	Ashley Montgomery	Scott Smith
Brian Batten	Elizabeth Parker	Delegate Dave Bulova
Stefanie Taillon	Jacob Dorman	Senator Dave Marsden
Adrienne Kotula	Jefferson Flood	Pat Calvert
Jay Ford	Jennifer Pepson Elwood	Angela Davis
Emily Steinhilber	Jeremiah Stonefield	Abigail Johnson
Grace Tucker	Jill Bieri	Maria Mutuc
Ross Weaver	Kate Baker	Henry Pollard
	Margaret Rockwell	Mark Slauter
	Patrick Bradley	Natalie Snider
	Rebecca Murphy	Paige Wernig
	Rebekah Cazares	Curt Smith
	Stuart Geiger	Charlie Westbrook
	Will Isenberg	Celso Ferreira
	Jerry Sparks	Georgie Marquez
	Caitlin Verdu	Nicole Keller
	Jessica Lassetter	Luke Peters
	Chip Boyles	

Scheduled Speakers	
Name	Title, Organization
Matt Dalon, DCR	Flood Resilience Program Manager, DCR

Reference Links	
Item	Link
Meeting Agenda	https://www.dcr.virginia.gov/crmp/meeting/document/20220916-tac-agenda-2-1.pdf
Meeting Handouts/Presentation Slides	https://www.dcr.virginia.gov/crmp/meeting/document/20220916-tac-handouts-1-0.pdf
Video Recording of the Meeting	https://youtu.be/C8mYUbx37Ow

Agenda Item	Minutes
1. Call to Order and Roll Call	<p>Acting Secretary of Natural and Historic Resources Voyles called the meeting to order and provided introductory remarks. Voyles has been designated by Governor Younkin as the Chief Resilience Officer.</p> <p>This is the first TAC meeting since it has been codified under recent legislation. The focus of today's meeting is to get organized, review the status of flood resilience planning, and discuss next steps.</p> <p>The current TAC membership is limited to those called out in statute, but it is likely that additional members will be added in the future.</p>
2. Introductions	<p>TAC Members and staff introduced themselves.</p> <p>Voyles (SNHR/CRO) provided additional introductory remarks. Noting that the administration is committed to resiliency. 1) TAC will primarily focus on coastal Virginia, but we recognize that this is not just a coastal problem and need solutions that work for all Virginians 2) This is not a problem that any one jurisdiction, department, or program can solve alone. Programs and projects must be conducted in a comprehensive and cohesive manner. 3) Transparency in programs and policy is critical to build trust and accountability to address this issue.</p> <p>Voyles has asked DCR Director Wells to establish working group to coordinate resilience efforts across the state agencies to include funding and technical assistance.</p> <p>Voyles approved delegation authority of the Coastal Resilience Officer (CRO) to Director Matt Wells who will serve as the Chair for TAC meetings.</p> <p>Delegate Bulova provided comments and thanks to the group for the initial work done for the Coastal Resilience Master Plan (CRMP) and was pleased to sponsor House Bill 516.</p>
3. TAC Roles and Responsibilities	<p>The Chair presented on the TAC Roles and Responsibilities. [See TAC Roles and Responsibilities Slides in Meeting Handouts]</p> <p>No questions or comments.</p>

<p>4. FOIA Overview</p>	<p>DCR presented a FOIA Overview. [See FOIA Slides in Meeting Handouts]</p> <p>DCR noted that it will utilize the Flood.Resilience@dcr.virginia.gov email address to send out notifications. Please include this email account in TAC related correspondence to DCR. The Chair noted that DCR will distribute additional staff contact information for the TAC members.</p>
<p>5. TAC Charter Overview</p>	<p>DCR provided an overview of the Draft TAC Charter. [See TAC Charter Overview and Draft TAC Charter]</p> <p>Andrews (W&M) offered a recommendation to clarify being physically vs electronically present to vote. No objections from the group on the proposed clarification.</p> <p>Luckenbach (VIMS) questioned the definition of quorum. DCR noted that the guidance provided was that the TAC could establish a definition for the TAC. It was noted that remote participation is available on certain instances and with limitations, however this does not preclude TAC members or public from viewing the meeting remotely. It was noted that a physical quorum is needed to conduct the public meeting.</p> <p>A motion to approve the TAC Charter was forwarded, seconded, and voting to pass the charter was verbally unanimous. No roll call requested. [Vote #1]</p>
<p>6. 2022 General Assembly Legislation Review</p>	<p>DCR provided a presentation on 2022 General Assembly Legislation that impact the work of the TAC. [See 2022 General Assembly Legislation Slides]</p> <p>The Chair noted that the VFPMP will be called the “Statewide Plan”, goal is to align the CRMP, Statewide Plan and the Community Flood Preparedness Fund (CFPF).</p> <p>Senator Marsden (provided comments via phone that were presented to the group via Wells) thanked the group and noted that flooding is a statewide concern, including the in-land areas that also experience flooding.</p>
<p>7. Coastal Resilience Master Plan Update</p>	<p>DCR provided a presentation on the Coastal Resilience Master Plan Update. [See Coastal Resilience Master Plan Update Slides]</p> <p>The Chair noted that DCR plans to put the Framework and the Plan (CRMP Phase 1) out for a 30-day public comment period. This will give everyone a chance to provide formal feedback. Feedback will likely be summarized and discussed at the next TAC meeting.</p> <p>McFarlane (HRPDC) asked about the status of the Strategic Coastal Relocation document that was prepared in 2021 and led by the TAC Science, Research, and Best Practices subcommittee was discussed. DCR noted that the document is still in draft form and that there is no timetable for release.</p> <p>McFarlane (HRPDC) asked on the status of the Pluvial/Precipitation Based Flooding work was discussed. DCR noted that work is still under consideration.</p> <p>The group raised a question on subcommittees, and the need for one to complete the Strategic Coastal Relocation document. That discussion was deferred to later in the agenda (10. TAC Member Discussion)</p>

<p>8. Virginia Flood Protection Master Plan Update</p>	<p>DCR provided a presentation on the Virginia Flood Protection Master Plan. [See Virginia Flood Protection Master Plan]</p> <p>Swanson (VDOT) questioned how the statewide watershed-based approach would integrate with Phase 2 of the Coastal Resilience Master Plan. DCR noted that the pluvial work would be on a watershed-based approach.</p> <p>McGlathery (UVA) asked how the Eastern Shore would be handled as there are no major rivers. DCR noted that the Eastern Shore would be divided between the Atlantic watershed and the Chesapeake Bay watershed.</p> <p>Ruffa (CraterPDC) noted that CraterPDC exists in multiple watersheds/major river basins and that the area that flows south to North Carolina is often left out of Coastal Planning and that including riverine flooding into Phase 2 of the Coastal Resilience Master Plan could lead to more holistic planning.</p> <p>The Chair noted the planned alignment between the Coastal and Statewide plans but while there is good data for the coastal regions of the state but not for the rest of the state.</p> <p>Goulet (NVRC) asked about the timing of this work. DCR noted the workflow is pending. The Chair noted that the TAC can elevate certain issues that should be addressed.</p>
<p>9. Community Outreach and Engagement Plan Update</p>	<p>DCR provided a presentation on the Community Outreach and Engagement Plan. [See Outreach and Engagement Plan Update Slides]</p> <p>The Chair noted that DCR is working with ODOI and thanked Dr. Atkins and Perez for the considerations of these plans.</p> <p>DCR noted that the plan is scheduled to go out for a 30-day public comment in October via regulatory town hall. Final plan completed by the end of this year. Implementation of the plan will start in 2023.</p>
<p>10. TAC Member Discussion</p>	<p>The Chair started the discussion with a presentation of potential TAC subcommittees. [See TAC Subcommittee Slides]</p> <p>Luckenback (VIMS) asked if additional outside experts, beyond the TAC membership, could be added to subcommittees. The Chair noted that they can, and also asked for suggestions from the TAC for recommendations for additional members of the TAC.</p> <p>McGlathery (UVA) noted that equity should be included as a subcommittee objective.</p> <p>McFarlane (HRPDC) asked if there should be a public policy or legal issues subcommittee. The Chair acknowledged the suggestion and asked McFarlane (HRPDC) for suggestions on the objectives and noted that all subcommittees must stay in the context of the Plans.</p> <p>Hartley (Sea Grant) asked if economic opportunities from new solution or innovation is that part of the scope of the TAC and subcommittees. The Chair noted that it is a part of the scope.</p>

	<p>The Chair asked TAC members to submit additional or alternative thoughts on subcommittees. Those items will be summarized and then circulated to the TAC.</p> <p>DCR noted that the subcommittee meetings are subject to FIOA requirements and that staff will coordinate logistics and record keeping.</p> <p>Andrews (W&M) noted that funding and outreach might touch on the same thing.</p> <p>The Chair asked that everyone to participate in at least one subcommittee and that the TAC members provide their preference for their top two subcommittees.</p> <p>Ruffa (CraterPDC) recommended keeping a limit of 4-6 subcommittees but could have as needed groups come in, like a sub-subcommittee to touch on more specific issues.</p> <p>The Chair noted items for the next meeting include: TAC member comments and public comments on Phase 1 and Framework; TAC member comments on items that should be in Phase 2.</p> <p>The Chair noted that future topics and locations for future meetings are always welcome. Proposed locations will need to accommodate the size of the committee and the ability to live stream.</p> <p>The TAC noted that the next meeting will probably be early December and intends for the meeting to be more interactive/discussion based.</p>
<p>11. Public Comment</p>	<p>Jay Ford (CBF) Thanks to secretary/director and members. One area to focus on are the gaps in data around critical natural infrastructure. Projects can take years and resilience programs should consider these. Highlight to invite members of the NGO community that have water quality, policy and science, and geosystem service expertise.</p> <p>Emily Steinhilber (EDF) Thanks to all. The work is huge. Timing Phase 2 into Virginia-wide plan and the CFPF, that work is incredibly important to Virginia. And how to prioritize projects. Issue of equity should continue to be centered in the work and in the data and economic approach. NGOs can provide value to this work. i.e., in technical expertise.</p> <p>Ross Weaver (Wetlands Watch) NGOs have a lot of technical expertise to offer and are happy to help.</p>
<p>12. Adjourn</p>	<p>Meeting adjourned ~12:35pm.</p>

Voting Records

1. Motion to accept the TAC Charter with wording amendment recommended by Elizabeth Andrews. Passed by unanimous verbal vote. No roll call requested.

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

Virginia Coastal Resilience Technical Advisory Committee

Quarterly TAC Meeting Agenda, Revision 9/13/22

Date: Friday, September 16, 2022
Time: 10:30 AM

Location: Patrick Henry Building, East Reading Room
1111 East Broad Street, Richmond, VA 23219

Virtual Public Access: Register at <https://attendee.gotowebinar.com/register/47378381524166411>

Meeting Agenda

- 1) Call to Order and Roll Call
- 2) Introductions
- 3) TAC Roles and Responsibilities
- 4) FOIA Overview
- 5) TAC Charter Overview
- 6) 2022 General Assembly Legislation Review
- 7) Coastal Resilience Master Plan Update
- 8) Virginia Flood Protection Master Plan Update
- 9) Community Outreach and Engagement Plan Update
- 10) TAC Member Discussion
- 11) Public Comment
- 12) Adjourn

Coastal Resilience Technical Advisory Committee (TAC)

Roles and Responsibilities

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

3



TAC Roles and Responsibilities

Roles and Responsibilities via [§10.1-659](#)

The Chief Resilience Officer, in coordination with the Special Assistant to the Governor for Coastal Adaptation and Protection and the Director, shall establish the Virginia Coastal Resilience Technical Advisory Committee (the Committee) to assist with developing, updating, and implementing the Virginia Coastal Resilience Master Plan.

The TAC shall ensure that:

- Risk evaluations and project prioritization protocols are regularly updated and are informed by the best applicable scientific and technical data;
- Statewide/regional needs are addressed using the best applicable science and long-term resilience approaches; and
- The [Virginia Coastal Resilience Master Planning Framework](#) is adhered to in the development and updating of the Virginia Coastal Resilience Master Plan.

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

4



TAC Roles and Responsibilities

Roles and Responsibilities via [§10.1-659](#)

Attend Quarterly TAC Meetings to:

- Review updates to the Virginia Coastal Resilience Master Plan
- Receive updates about the progress of the Virginia Flood Protection Master Plan
- May be called upon to assist DCR with the Virginia Flood Protection Master Plan

TAC Roles and Responsibilities

TAC Membership via [§10.1-659](#)

The Committee shall be comprised of representatives of state agencies, coastal planning district commissions, regional commissions, academic advisors, and any other representatives as needed. Members shall serve at the pleasure of the Governor and shall include the following individuals or their designees:

- State Government: DOI, ODGA, SACAP
- Coastal PDC: A-NPDC, Crater PDC, GWRC, HRPDC, MPPDC, NNPDC, NVRC, PlanRVA
- State Agency: DCR, DEQ, DHCD, Sea Grant, VDEM, VDOT, VMRC, VRA, VTRC
- University: VIMS, ODU-ICAR, W&M-VCPC, VT-Center for Coastal Studies, UVA-Environmental Resilience Institute
- Federal Partners: NAVY Mid-Atlantic, USACE
- Federally-Recognized Tribal Nations: Chickahominy, Chickahominy-Eastern Division, Monacan, Nansemond, Pamunkey, Rappahannock, Upper Mattaponi

Freedom of Information Act (FOIA) Overview

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

7



FOIA Overview

Purpose

By enacting this chapter, the General Assembly ensures the people of the Commonwealth ready access to public records in the custody of a public body or its officers and employees, and free entry to meetings of public bodies wherein the business of the people is being conducted... All public records and meetings shall be presumed open, unless an exemption is properly invoked.

[Code of Virginia §2.2-3700]

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

8



FOIA Overview

- The provisions of this chapter shall be liberally construed to promote an increased awareness by all persons of governmental activities and afford every opportunity to citizens to witness the operations of government.
- Exemptions do exist, but they are rare.
- Knowingly violating FOIA could carry a penalty of up to \$2000.
- This applies to the individual, not the board or agency.

The public has a right to know what public business is being transacted.

Two Pillars of FOIA

Public Records and Meetings

FOIA Overview

Public Records

- Except as otherwise specifically provided by law, all public records shall be open to citizens of the Commonwealth, representatives of newspapers and magazines with circulation in the Commonwealth, and representatives of radio and television stations broadcasting in or into the Commonwealth during the regular office hours of the custodian of such records.
- Access to such records shall be provided by the custodian in accordance with this chapter by inspection or by providing copies of the requested records, at the option of the requester. The custodian may require the requester to provide his name and legal address. The custodian of such records shall take all necessary precautions for their preservation and safekeeping. § 2.2-3704

FOIA Overview

Public Records

What Are Public Records?

- Documents – printed/electronic (including emails)
- Recordings
- Minutes (including draft minutes)
- In short, with few exceptions, if we have it in our possession, it is considered a public record.

What Records should TAC Members keep?

- DCR maintains all official meetings records, agendas, materials, minutes etc.
- Emails are subject to FOIA.

FOIA Overview

Meetings

- All meetings of the TAC are open, public meetings.
- What constitutes a meeting?
 - A formal meeting, such as today
 - Meetings of designated subcommittees
 - A meeting, informal or not, of three or more members of the body (or less than three if designated as a committee)
 - Email correspondence? More in a minute.
- When is a meeting required?
 - For any vote
 - For any official TAC business

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

13



FOIA Overview

Electronic Meetings

No meeting shall be conducted through telephonic, video, electronic or other electronic communication means where the members are not physically assembled to discuss or transact public business, except as provided in § 2.2-3708.2

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

14



FOIA Overview

When can the TAC Meet Electronically?

The Governor or locality has declared a state of emergency “provided that (i) the catastrophic nature of the declared emergency makes it impracticable or unsafe to assemble a quorum in a single location and (ii) the purpose of the meeting is to provide for the continuity of operations of the public body or the discharge of its lawful purposes, duties, and responsibilities.”

FOIA Overview

Provisions for Electronic Participation

- A physical quorum, as defined in TAC Charter, must be present.
- A member may participate electronically if:
 - On or before the day of the meeting, the member notifies the chair that:
 - The member has a medical condition that prevents them from attending.
 - The member has to care for a family member with a medical condition
 - The member is unable to attend due to a personal matter.
- Limited to 2 meetings or 25 percent of meetings per year.

FOIA Overview

What Else Is Considered A Meeting?

- Email between more than two members.
- Social Media (Facebook, Twitter, etc.)
- Chat Rooms

All of these are improper meetings and considered a violation of FOIA.

FOIA Overview

TAC Staff Support will:

- Establish time and location
- Post notice to website, Townhall, etc.
- Make agenda and materials available to the public
- Record and make available minutes, to include electronic recordings
- Post draft minutes within 10 business days
- Post final minutes within 3 business days following approval

TAC Charter Overview

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

19



TAC Charter Overview

- Section 1 -- PURPOSE AND BASIC PRINCIPLES
 - Membership
- Section 2 -- MEETINGS
 - Quorum and Method of Voting
 - Policy for Remote Participation
- Section 3 -- OFFICERS
- Section 4 -- CONDUCT OF BUSINESS
 - Public Comment
 - Robert's Rules of Order
- Section 5 -- AGENDA
- Section 6 -- TAC APPOINTMENTS
- Section 6-1 TAC Subcommittees
 - Subcommittees
 - Advisor Appointments
 - Attendance

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

20



2022 CRMP TAC Charter

Table of Contents

SECTION 1 -- PURPOSE AND BASIC PRINCIPLES	2
SECTION 1-1 PURPOSE OF THE TAC CHARTER	2
SECTION 1-2 FIVE BASIC PRINCIPLES UNDERLYING THE TAC CHARTER	2
SECTION 1-3 MEMBERSHIP	2
SECTION 1-4 ROLE OF THE TAC	2
SECTION 2 -- MEETINGS.....	3
SECTION 2-1 QUARTERLY MEETINGS.....	3
SECTION 2-2 SPECIAL MEETINGS	3
SECTION 2-3 QUORUM AND METHOD OF VOTING	3
SECTION 2-4 POLICY FOR REMOTE PARTICIPATION IN TAC MEETING	3
SECTION 2-5 TAC TO SIT IN OPEN SESSION	4
SECTION 3 -- OFFICERS	4
SECTION 3-1 CHAIR AND VICE-CHAIR	4
SECTION 3-2 PRESERVATION OF ORDER.....	4
SECTION 4 -- CONDUCT OF BUSINESS.....	4
SECTION 4-1 STATUTORY REQUIREMENTS	4
SECTION 4-2 ORDER OF BUSINESS	4
SECTION 4-3 PUBLIC COMMENT.....	5
SECTION 4-4 MEETING AGENDA SUBMISSIONS	5
SECTION 4-5 CHAIR SUSPENDING RULES	5
SECTION 4-6 AMENDMENT OF RULES.....	5
SECTION 4-7 ROBERT'S RULES OF ORDER.....	5
SECTION 5 -- AGENDA	5
SECTION 5-1 PREPARATION	5
SECTION 5-2 DELIVERY OF AGENDA	5
SECTION 6 -- TAC APPOINTMENTS	6
SECTION 6-1 TAC STANDING OF AD-HOC SUBCOMMITTEES.....	6
SECTION 6-2 ADVISOR APPOINTMENTS	6
SECTION 6-3 ATTENDANCE.....	6

SECTION 1 -- PURPOSE AND BASIC PRINCIPLES

Section 1-1 Purpose of the TAC Charter

- A. To enable the Coastal Resilience Technical Advisory Committee (hereinafter referred to as the TAC) to conduct meetings expeditiously and efficiently;
- B. To protect the rights of each individual;
- C. To preserve a spirit of cooperation among TAC members; and
- D. To determine the pleasure of the TAC on any matter.

Section 1-2 Five Basic Principles Underlying the TAC Charter

- A. Only one subject may claim the attention of the TAC at one time;
- B. Each item presented for consideration is entitled to full and free discussion;
- C. Every member has rights equal to every other member;
- D. In instances where the TAC acts by majority decision, the rights of the minority must be preserved; and
- E. TAC members should seek to act in the best interests of the Commonwealth.

Section 1-3 Membership

- A. The TAC is an advisory committee pursuant to Section 10.1-659 of the Code of Virginia.
- B. Members shall serve at the pleasure of the Governor, subject to statutory requirements. Appointed members shall serve in an advisory role without compensation.
- C. The TAC shall be comprised of representatives of state agencies, coastal planning district commissions, regional commissions, academic advisors, and any other representatives as needed.
- D. The Governor or the Chair acting on the Governor's behalf may invite any other representatives as needed to serve as a TAC member.
- E. All TAC members may designate someone within their organization to serve as their designee. TAC members may identify an Alternate to serve as a proxy for the TAC member. Both designees and alternates shall be consistent and documented.
- F. The Department, the Special Assistant to the Governor for Coastal Adaptation and Protection, and the Coastal Zone Management Program shall provide staff support to the TAC.

Section 1-4 Role of the TAC

- A. Pursuant to Section 10.1-659 of the Code of Virginia, the TAC shall assist with developing, updating, and implementing the Virginia Coastal Resilience Master Plan.
- B. The TAC shall ensure that
 - 1. Risk evaluations and project prioritization protocols are regularly updated and are informed by the best applicable scientific and technical data;
 - 2. Statewide and regional needs are addressed using the best applicable science and long-term resilience approaches; and
 - 3. The Virginia Coastal Resilience Master Planning Framework is adhered to in the development and updating of the Virginia Coastal Resilience Master Plan.
- C. The TAC shall also review updates to the Virginia Coastal Resilience Master Plan and receive updates about the progress of the Virginia Flood Protection Master Plan at each meeting.
- D. Additionally, the TAC may be called upon to assist the Department with the development and updating of the Virginia Flood Protection Master Plan.

SECTION 2 -- MEETINGS

Section 2-1 Quarterly Meetings

- A. The time and place of quarterly meetings of the TAC shall be established by the Chair in coordination with TAC members in accordance with Section 10.1-659 of the Code of Virginia. TAC support staff will send meeting invitations to all TAC members as well as post meetings on Regulatory Town Hall and the DCR Website at least seven working days prior to the meeting.

Section 2-2 Special Meetings

- A. The TAC may hold such special meetings, as the Chair deems necessary, at such times and places as it may find convenient; and it may adjourn from time to time. Only matters specified in the notice shall be acted upon unless all of the members of the TAC are present. Where a special meeting has been called, the TAC shall give such notice of the time, place and purpose of the meeting as is feasible.

Section 2-3 Quorum and Method of Voting

- A. At any meeting, those members of the TAC physically present shall constitute a quorum.
- B. All questions submitted to the TAC for decision shall be determined by a recorded vote. The Chair may choose to have the vote by voice vote or by show of hands. Any member who votes or abstains on a matter shall have the option of asking for a roll call vote. Upon such request, the TAC shall be polled and the name of each member voting and how he or she voted shall be recorded.
- C. Unless otherwise specified in this TAC Charter, motions shall be decided by a majority of members present, physically and virtually (pursuant to Section 2-4), and voting.
- D. Provided that notice that a recommendation may be adopted is included in the agenda provided to members at least seven working days prior to a meeting, the TAC may make recommendations consistent with the mission and purpose of the TAC. When possible, these recommendations should be adopted by consensus. Where consensus is not possible, recommendations may be adopted by majority vote. However, members dissenting from the recommendation may provide a minority report that shall be included with the recommendation.
- E. A tie vote fails.

Section 2-4 Policy for Remote Participation in TAC Meeting

- A. It is the policy of the TAC that individual TAC members may participate in meetings of the TAC by electronic communication means from a remote location that is not open to the public only as permitted by Virginia Code §2.2-3708.1, as amended, and this policy. This policy shall apply strictly and uniformly to the entire membership and without regard to the identity of the member requesting remote participation or the matters that will be considered or voted on at the meeting.
- B. An individual member may participate from a remote location only if a quorum of the TAC is physically assembled at the primary or central meeting location, and the TAC has made arrangements for the voice of the remote participant to be heard by all persons at the primary or central meeting location.
- C. Remote participation in a meeting due to an emergency or personal matter may be approved only if the requesting member notifies the Chair of the TAC that such member is unable to attend the meeting due to an emergency or personal matter and identifies with specificity the nature of the emergency or personal matter.
- D. Remote participation in a meeting due to a temporary or permanent disability or other medical condition may be approved only if the requesting member notifies the Chair of the TAC that such

member is unable to attend the meeting due to a temporary or permanent disability or other medical condition that prevents the member's physical attendance.

- E. As required by law, in the event of any such participation by a member from a remote location, the TAC shall record in its minutes the specific nature of the emergency, personal matter, temporary or permanent disability or other medical condition, and the location from which the TAC member participated remotely.
- F. As required by law, remote participation that is due to an emergency or personal matter shall be limited in each calendar year for each individual member to two (2) meetings or 25 percent of the meetings of the TAC, whichever is fewer. This limitation shall apply separately with respect to the meetings of each of the TAC's Subcommittees.
- G. An individual member's request for participation from a remote location under this policy shall be considered approved upon receipt of the request by the Chair of the TAC unless the request is in violation of Section 2.2- 3708.1 of the Code of Virginia, as amended. If a member's participation from a remote location is disapproved because such participation would violate this policy, such disapproval shall be recorded in the minutes with specificity.

Section 2-5 TAC to Sit In Open Session

- A. The TAC shall sit in open session and all persons conducting themselves in an orderly manner may attend the meetings.

SECTION 3 -- OFFICERS

Section 3-1 Chair and Vice-Chair

- A. Pursuant to Section 10.1-659 of the Code of Virginia, the Chief Resilience Officer as defined by Section 2.2-222.4 of the Code of Virginia shall serve as Chair of the Committee.
- B. The Chair shall preside over all meetings of the TAC. The Chair shall appoint TAC members to serve on standing committees and ad hoc committees established by the TAC. The Chair shall annually appoint a Chair for each standing subcommittee.
- C. The Vice-Chair shall be the Special Assistant to the Governor for Coastal Adaptation and Protection as defined by Section 2.2-435.11 of the Code of Virginia. The Chair may appoint additional Vice-Chairs and officers, as he deems necessary.

Section 3-2 Preservation of Order

- A. At meetings of the TAC, the presiding officer shall preserve order and decorum.

SECTION 4 -- CONDUCT OF BUSINESS

Section 4-1 Statutory Requirements

- A. The TAC will comply with the requirements of the Freedom of Information Act (FOIA) as contained within Chapter 37 of Title 2.2 of the Code of Virginia and the Administrative Process Act (APA) as contained within Chapter 40 of Title 2.2 of the Code of Virginia.

Section 4-2 Order of Business

- A. The TAC shall adopt an agenda for each meeting by recorded vote pursuant to Section 2-3. The adoption of the agenda shall be the first item for action following the Call to Order and Roll Call.

Section 4-3 Public Comment

- A. The TAC shall set aside no less than twenty (20) minutes for Public Comment on each Quarterly TAC Meeting Agenda. Public Comment shall be held after the conclusion of the regular agenda. During this period the TAC shall receive comment from any member of the general public on any non-agenda item or any agenda item not scheduled for public hearing by the TAC, provided that the Chair prohibit or proscribe the use of obscenity or other speech tending to create a breach of the peace; and provided further that no individual shall be permitted to address the TAC for more than five (5) minutes. In the event that more than four (4) speakers wish to be heard during Public Comment, the Chair shall allocate the aforesaid twenty (20) minutes among speakers in an equitable manner. The time allocated for Public Comment may be extended by majority vote of the TAC.

Section 4-4 Meeting Agenda Submissions

- A. TAC agenda requests from TAC members shall be submitted to the Chair at least fourteen calendar days prior to the Quarterly TAC meeting.

Section 4-5 Chair Suspending Rules

- A. One or more of these rules of the TAC Charter may be suspended with the concurrence of a two-thirds majority of the members present.

Section 4-6 Amendment of Rules

- A. This TAC Charter may be amended by majority vote, provided that a proposed amendment may not be voted on unless the text thereof shall have been presented to the TAC at a previous meeting at which the date for a vote on the proposal had been established. Any proposed amendment shall be subject to further amendment at the meeting at which the vote is taken.

Section 4-7 Robert's Rules of Order

- A. A. The proceedings of the TAC, except as otherwise provided in this TAC Charter and by applicable State law, shall be governed by Robert's Rules of Order.

SECTION 5 -- AGENDA

Section 5-1 Preparation

- A. The Chair shall prepare an agenda for the Quarterly TAC Meetings conforming to the order of business specified in Section 4-1 titled "Order of Business".
- B. Matters may be placed on a TAC agenda only in the following manner:
 - 1. By the Chair; or
 - 2. At the request of a member, with the assent of the Chair; or
 - 3. By a majority of members present at a meeting and voting, provided that the matter shall not be considered for a vote until a subsequent meeting.
- C. All items that are requested to be placed on the agenda must be submitted to the Chair at least fourteen calendar days prior to the meeting.

Section 5-2 Delivery of Agenda

- A. The agenda and related materials for Quarterly TAC meetings shall be available to each member of the TAC and the public at least seven working days prior to the meeting.

SECTION 6 -- TAC APPOINTMENTS

Section 6-1 TAC Standing of Ad-Hoc Subcommittees

- A. The Chair may establish standing or ad-hoc subcommittees of the TAC. Each subcommittee, once established by the TAC, shall consist of at least two members of the TAC appointed by the Chair annually or at the inception of the subcommittee for new standing subcommittees. The Chair may appoint individuals to subcommittees who are not otherwise members of the TAC, with that individual's consent.

Section 6-2 Advisor Appointments

- A. All appointments of advisors, other than members of the TAC, shall be made by the Governor or by the Chair at the Governor's behalf.
- B. Advisors may participate in TAC meetings and subcommittees but do not have standing for voting.

Section 6-3 Attendance

- A. TAC committee and subcommittee members (either in person or through their designees or alternates) are expected to make good faith efforts to attend all scheduled meetings of the TAC and subcommittees to which they have been appointed.

2022 General Assembly Legislation Review

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

21



2022 General Assembly Legislation Review

Passed Bills Related to Coastal Resilience

- HB516 (Bulova) / SB551 (Marsden) - Flood Resiliency and Protection
- HB517 (Bulova) - Chief Resilience Officer
- HB1309 (Bulova) / SB756 (Lewis) - Resilient Virginia Revolving Loan Fund
- HB 354 (Tata) / SB315 (Spruill) - Virginia Military Community Infrastructure Grant Program and Fund
- HB 30 - Budget Bill

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

22



2022 General Assembly Legislation Review

HB516 (Bulova) / SB551 (Marsden) - Flood Resiliency and Protection

- Amended § [10.1-658](#) State interest in Resilience and Flood Control.
 - *The General Assembly shall prioritize measures that use community-scale and regional-scale planning, protect and enhance natural and nature-based approaches, address socioeconomic inequities, and enhance equity through flood resilience and preparedness.*
 - *The General Assembly supports and encourages flood resilience through implementation of the [Plans] developed pursuant to § [10.1-602](#).*
 - *The Department shall be responsible for the implementation of the [Plans] and shall serve as the lead administrator.*
 - *The Virginia Coastal Resilience Master Plan shall be updated at least every five years; shall, at a minimum, be a place-specific plan for mitigating severe and repetitive flooding; and shall, at a minimum, [Framework Principles]*

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

23



2022 General Assembly Legislation Review

HB516 (Bulova) / SB551 (Marsden) - Flood Resiliency and Protection

- Amended § [10.1-659](#) Flood Protection Programs; Coordination.
 - Changed Coordination Meetings to occur Annually
 - Coastal Resilience Technical Advisory Committee (TAC)
 - CRMP Update Deadline (12/31/2024) and Phase 2 Requirements
 - all major flood hazards, including precipitation-driven flooding;
 - a list of all projects considered and an update of the status of all projects previously implemented; and
 - a comprehensive risk assessment of critical human and natural infrastructure.
 - Community Outreach and Engagement Plan for the Plans
 - Prepared by 12/31/2022
 - The outreach and engagement plan shall **strive** for meaningful involvement by ensuring that
 - affected and vulnerable community residents have **access and opportunity to participate** in the full cycle of the decision-making process about the development of and updates to the Plans, and
 - **decision-makers shall seek out and consider such participation**, allowing the views and perspectives of community residents to shape and influence decisions.
 - VFPMP Deadline (12/31/2026)

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

24



2022 General Assembly Legislation Review

HB516 (Bulova) / SB551 (Marsden) - Flood Resiliency and Protection

- Amended § [10.1-602](#) Powers and duties of Department [DCR]
 - Changed Flood Protection Plan to Virginia Flood Protection Master Plan
 - This *Plan* shall be a *place-specific plan for mitigating severe and repetitive flooding and shall, at a minimum, [Framework Principles]*
 - *Best available science*
 - *Socioeconomic inequities and equity*
 - *protecting and enhancing natural infrastructure and nature-based approaches*
 - *utilize community and regional scale planning*
 - *focus on cost-effective solutions*
 - *DCR shall serve as the lead administrator, implement, and integrate the Plans (CRMP & VFPMP)*

2022 General Assembly Legislation Review

HB516 (Bulova) / SB551 (Marsden) - Flood Resiliency and Protection

- Amended § [2.2-222.4](#) Chief Resilience Officer
- Status of Flood Resilience in the Commonwealth
 - Beginning July 1, 2023, and every two years thereafter
 - Report to the Governor and General Assembly to:
 - Evaluation of flood protection for critical infrastructure, including human and natural infrastructure.
 - Identify risks to critical transportation, energy, communication, water and food supply, waste management, health, and emergency services infrastructure.
 - Include the status of flood resilience planning.

2022 General Assembly Legislation Review

HB517 (Bulova) - Chief Resilience Officer

- Amended § [2.2-215](#) Secretary of Natural and Historic Resources
 - The Secretary ~~shall serve as the Chief Resilience Officer for the purposes of duties required pursuant to § [2.2-222.4](#),~~
 - The Secretary shall be responsible to the Governor for *Chief Resilience Officer*
- § [2.2-220.5](#) *Chief Resilience Officer.*
 - *The Governor shall designate a Chief Resilience Officer*
 - The Chief Resilience Officer shall serve as the primary coordinator of resilience and adaptation initiatives in Virginia and as the primary point of contact regarding issues related to resilience, recurrent flooding, all flooding-related pre-disaster hazard mitigation, and adaptation.
 - *Create and oversee the implementation of a Virginia Flood Protection Master Plan and a Virginia Coastal Resilience Master Plan*
- Repealed § [2.2-222.4](#) (CRO listed in [Article 8. Secretary of Public Safety and Homeland Security](#))

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

27



2022 General Assembly Legislation Review

HB1309 (Bulova) / SB756 (Lewis) - Resilient Virginia Revolving Loan Fund

- Article 1.4 Resilient Virginia Revolving Loan Fund
 - Fund will make loans and grants to local governments for resilience projects via Virginia Resources Authority (VRA)
 - Fund has been capitalized with \$25 million from moneys previously allocated to the CFPF
 - DCR will administer and is developing guidelines with VRA
 - Anticipate accepting first round of applications in early CY2023
 - Transparency:
 - Fund guidelines/manuals will be put out for public comment;
 - Review Committee will be established to review applications

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

28



2022 General Assembly Legislation Review

HB 354 (Tata) / SB315 (Spruill) - Virginia Military Community Infrastructure Grant Program and Fund

- Article 11 of Chapter 2 of Title 2.2 a section numbered [§2.2-233.1](#)
 - Establishes the Virginia Military Community Infrastructure Grant Fund (the Fund) to support military communities in the Commonwealth by awarding grants to aid the planning and design, construction, or completion of infrastructure projects that enhance military readiness, installation resiliency, or quality of life for military communities.
 - The bill directs the Secretary of Veterans and Defense Affairs to develop guidance and criteria to be used in awarding grants from the Fund and an annual grant application that sets out certain requirements for a grantee.
 - "Military community" means any locality that can demonstrate that more than five percent of the community's economy is derived from military funding.

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

29



2022 General Assembly Legislation Review

HB 30 - Budget Bill

- Item #160 Virginia Institute of Marine Science (VIMS)
 - H. Out of this appropriation, \$432,894 and 3.15 positions [FY 23 & FY24] from the general fund is designated to support research on sea level rise and state-of-the-art storm surge modeling, as well as for subcontracting with the College of William and Mary's Virginia Coastal Policy Center (CWMVCPC) to conduct policy and legal analyses of stakeholder-driven adaptation responses to sea level rise, in support of the Commonwealth Center for Recurrent Flooding Resiliency (CCRFR).
- Item #181 Old Dominion University (ODU)
 - G. Out of this appropriation, \$1,500,000 each year (FY23 & FY24) from the general fund is designated to support the Institute for Coastal Adaptation and Resilience (ICAR) at Old Dominion University (ODU) and its collaboration with the Chesapeake Bay Foundation (CBF).

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

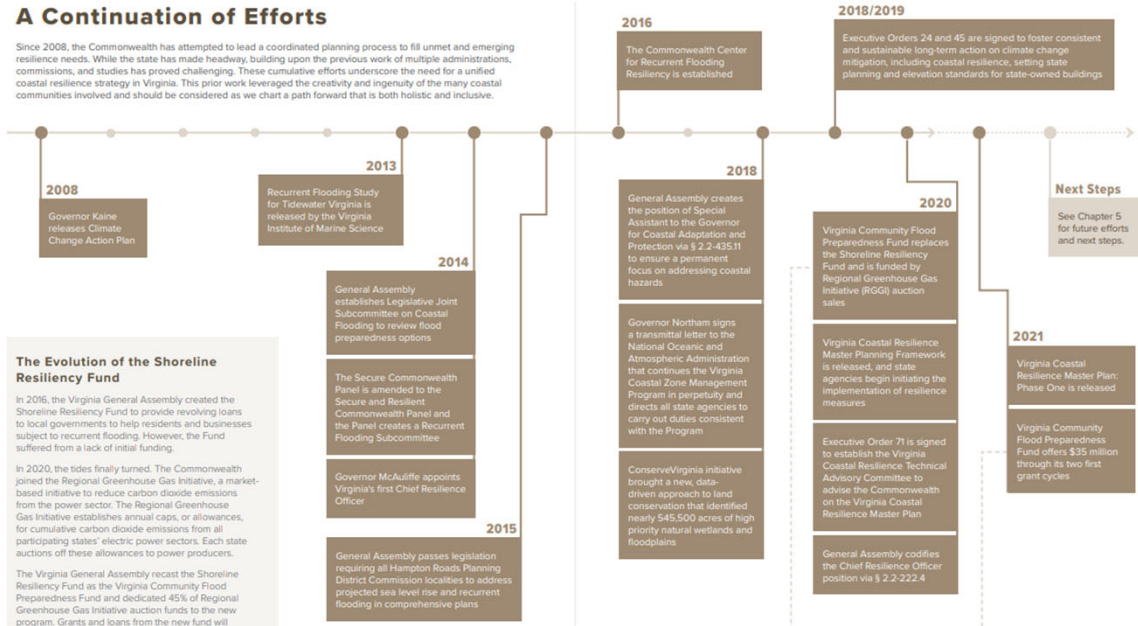
30



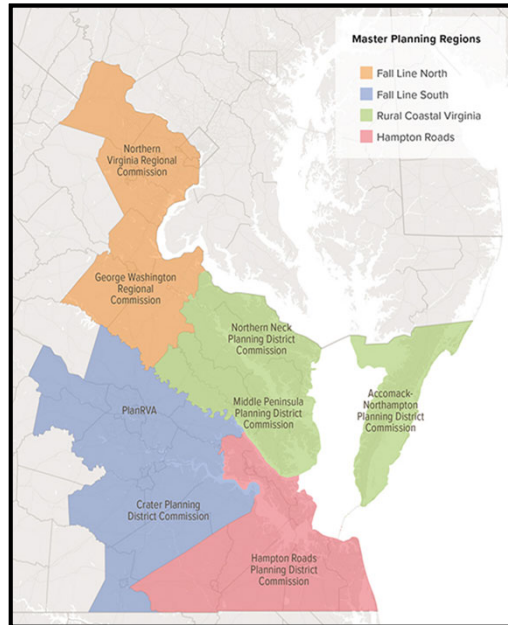
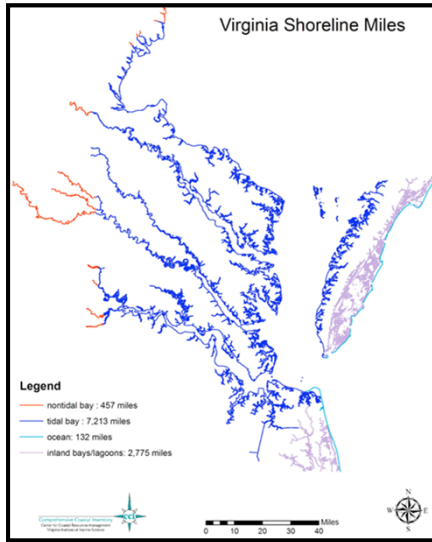
Virginia Coastal Resilience Master Plan

A Continuation of Efforts

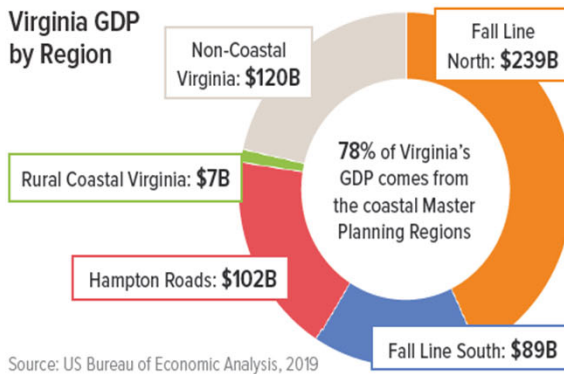
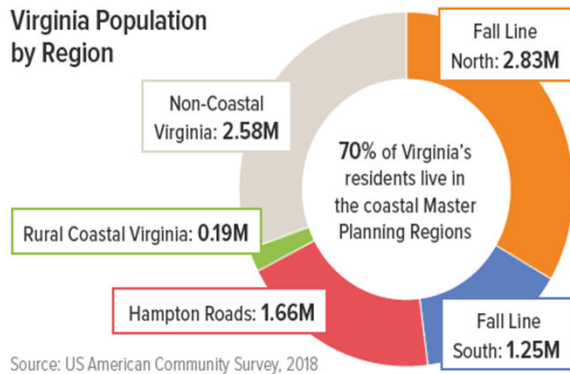
Since 2008, the Commonwealth has attempted to lead a coordinated planning process to fill unmet and emerging resilience needs. While the state has made headway, building upon the previous work of multiple administrations, commissions, and studies has proved challenging. These cumulative efforts underscore the need for a unified coastal resilience strategy in Virginia. This prior work leveraged the creativity and ingenuity of the many coastal communities involved and should be considered as we chart a path forward that is both holistic and inclusive.



Coastal Virginia



Coastal Virginia



Coastal Resilience Master Plan

Framework Goals



Prioritize Projects



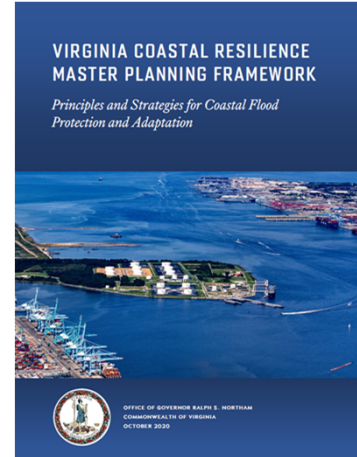
Financing Strategy



Incorporate Climate Change Projections



Coordinate Efforts



Coastal Resilience Master Plan

Framework Principles



Best Available Science



Socioeconomics



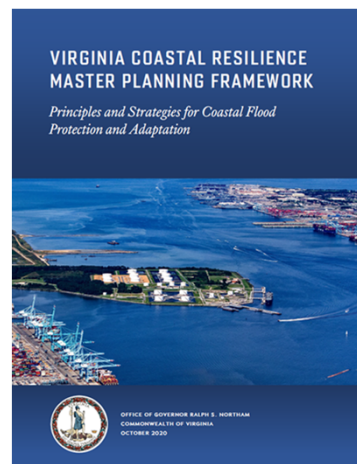
Nature-Based Solutions



Community and Regional Scale



Cost-Effective Solutions



Coastal Resilience Master Plan

Phase 1 Overview

Public, Stakeholder & TAC Engagement

Conceptual Model/ Technical Study Process

Master Plan Development

1. Characterize Hazards

2. Understand Impacts

3. Identify Strategies

4. Evaluate Projects

5. Evaluate Funding

March 2021

December 2021

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

37

Virginia Department of Conservation & Recreation

Coastal Resilience Master Plan

Phase 1 Accomplishments

- Determined the consequences of inaction.
- Established a project database.
- Identified where the Commonwealth can support.
- Built a foundation for planning and partnership.

Phase 1 Limitations

- Completed on an accelerated timeline.
- Limited public input.
- A partial assessment, rather than a plan.

Public, Stakeholder & TAC Engagement

Conceptual Model/ Technical Study Process

Master Plan Development

1. Characterize Hazards

2. Understand Impacts

3. Identify Strategies

4. Evaluate Projects

5. Evaluate Funding

March 2021

December 2021

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

38

Virginia Department of Conservation & Recreation

Coastal Resilience Master Plan

Public, Stakeholder, & Stakeholder Engagement

Phase 1 Activities

- Survey
 - Organizational Survey
 - Individual Survey
- Meetings
 - 9 Workgroup Meetings
 - 20 Public Meetings
 - 7 TAC Meetings
 - 60 Subcommittee Meetings
- DCR CRMP Website

Recent Activity

- Meeting Request Form
- 14 Presentations
- Monthly NGO Meetings

Gaps Identified

- Community outreach limited in scope
- Neither Plan nor Framework made available for public comment

Recommendations

- Develop and implement a sustainable public planning, outreach, and engagement process
- Expanding tribal engagement and understanding of cultural resources

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

39



Coastal Resilience Master Plan

Technical Study, Characterize Hazards

Phase 1 Activities

- Coastal Flood Hazard
 - Tidal Flooding
 - MLW, MHW, 1.5xMTR
 - Storm Surge
 - 2-yr, 5-yr, 10-yr, 25-yr, 50-yr, 100-yr, 500-yr AEP
 - Sea Level Rise
 - NOAA 2017 SLR Gridded Product
 - 2020, 2040, 2060, & 2080

Recent Activity

- Coastal Flood Hazard 2100
- Flood Hazard Data Available for Download
<https://registry.opendata.aws/vadcr-crmp-aws/>

Gaps Identified

- Hazard analysis limited to portion of risk

Recommendations

- Include rainfall-driven, riverine, and compound flooding
- Develop coastal erosion mapped projections
- Groundwater impacts data collection and analysis

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

40



Coastal Resilience Master Plan

Technical Study, Understand Impacts

Phase 1 Activities

- Impacts by
 - Community Resources
 - Critical Sectors
 - Natural Infrastructure
- Community Context
 - 2018 ACS Data
 - Social Vulnerability x Flood Hazard Exposure

Recent Activity

- Aggregate Impact Data Available for Download
<https://registry.opendata.aws/vadcr-crmp-aws/>

Gaps Identified

- Limited data

Recommendations

- Asset Data - Improve the accessibility, standardization, and completeness of geospatial data. A common statewide dataset and collection process that is aligned with statewide data sharing protocols and supported across agencies and localities.
- Demographic Data – Update demographic data with 2020 American Community Survey data. Assess future demographic impacts and population displacement metrics.
- Asset Criticality - Develop a process to rate the criticality of infrastructure using objective and subjective inputs.
- Risk Assessment - Improve built and natural infrastructure vulnerability and risk assessments.
- Economic Impacts - Improve and expand economic loss modeling.

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

41



Coastal Resilience Master Plan

Technical Study, Project Identification and Evaluation

Phase 1 Activities

- Project and Initiatives Schema
- Project and Initiatives Database
 - 161 Initiatives
 - 355 Projects
- Tested a Project Evaluation Approach
- Example Reference Project Profiles

Recent Activity

- Web-based Project Owner Access to Project and Initiatives Database to Edit, Add, and Archive Information (Pending)

Gaps Identified

- Project development and evaluation tools not fully developed.
- Limited applicability to project selection for current or future resilience and funding programs.

Recommendations

- Project Identification - Establish a standardized process for developing projects for impact hotspots that lack ongoing or proposed efforts.
- Project Inventory - Gather additional and updated project information. Identify options and opportunities to develop adaptation and protection solutions for identified gaps in high risk and vulnerable areas. Provide database entry training and example entries to improve consistency with project data entries.
- Project Evaluation - Improve data inputs and analyses to understand and evaluate a project's effectiveness. Establish a review team of independent technical experts to assist and review the evaluation process.
- RAFT - All localities should participate in the Resilience Adaptation and Feasibility Tool (RAFT) process.

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

42



Coastal Resilience Master Plan

Technical Study, Funding Strategy

Phase 1 Activities

- Developed a Funding Database
- Identified Funding Opportunities for Projects and Initiatives in the Database.

Recent Activity

- Web-based Access to Funding Database to Edit, Add, and Archive Funding Information (Pending)

Gaps Identified

- Database is not dynamic, difficult to update.

Recommendations

- Work with stakeholders to develop innovative funding opportunities.
- Coordinating financing solutions, encouraging and expanding opportunities with the assistance of the Virginia Community Flood Preparedness Fund where appropriate.

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

43



Coastal Resilience Master Plan

Master Plan Document, Website, and Web Explorer

Phase 1 Activities

- Phase 1 Master Plan Document
- DCR CRMP Website
- Coastal Resilience Web Explorer

Recent Activity

- Web-based Access to Project & Funding Databases to Edit, Add, and Archive Information (Pending)

Gaps Identified

- Not developed into a true plan that can be used to address resilience challenges

Recommendations

- Expand the Coastal Resilience Database and Web Explorer beyond the coastal region to encompass statewide resilience planning needs.
- Release the Introduction to Strategic Coastal Relocation document to advance the dialogue so communities can begin to consider options and make choices for themselves.

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

44



Coastal Resilience Master Plan

Phase 2 Requirements

- SACAP in coordination with DCR, shall update the Virginia Coastal Resilience Master Plan no later than December 31, 2024
(every 5 years thereafter)
- CRMP shall be a place-specific plan for mitigating severe and repetitive flooding and shall [adhere to the Framework Principles]
- Phase 2 will incorporate:
 - all major flood hazards, including precipitation-driven flooding
 - a comprehensive risk assessment of critical human and natural infrastructure
 - a list of all projects considered and an update of the status of all projects previously implemented
- Phase 2 will implement the Community Outreach and Engagement Plan

[2022 GA HB516/SB551 now §[10.1-658, 659](#)]

Virginia Flood Protection Master Plan

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

46



Virginia Flood Protection Master Plan

History of the Flood Protection Plan

History

- Established via Virginia House Document 64 in 1989
- Codified in §10.1-602
- Published in 1989, 1991, and 2005 (2005 included a *Guide for Citizens and Localities*)
- Draft Revision in 2018

Code Requirements

- Include
 - An inventory of flood-prone areas
 - An inventory of flood protection studies
 - A record of flood damages
 - Strategies to prevent or mitigate flood damage
 - Collection and distribution of information relating to flooding and flood plain management
- Online Format
- Updated Every 5 years

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

47



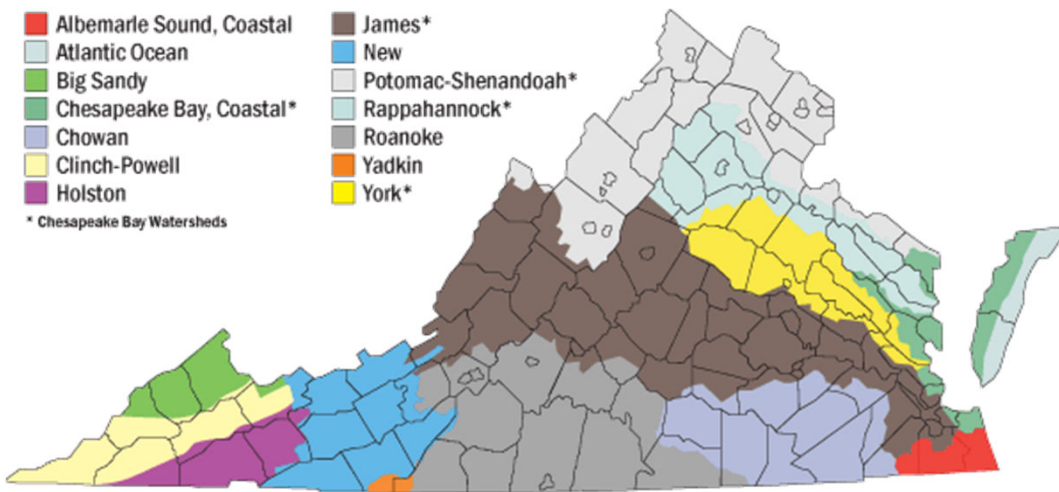
Virginia Flood Protection Master Plan

Updates via 2022 GA HB516/SB551 now [§10.1-602, 658, 659](#)

- The Plan shall be a place-specific plan for mitigating severe and repetitive flooding, [adhere to the Framework Principles], and include, at a minimum:
 - An inventory of flood-prone areas;
 - An inventory of flood protection studies;
 - A record of flood damages;
 - Strategies to prevent or mitigate flood damage; and
 - The collection and distribution of information relating to flooding and floodplain management.
- Due no later than Dec 31, 2026 (5-year update cycle)
- Must integrate Coastal Resilience Master Plan
- Must use a watershed based approach

Virginia Flood Protection Master Plan

Watershed Based Approach, Major River Basins



Virginia Flood Protection Master Plan

Status Update

- 2018 Draft Revision Update in Progress
- Future Plan Activities to be informed by the Community Outreach and Engagement Plan



Community Outreach and Engagement Plan

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

51



Community Outreach and Engagement Plan

2022 GA HB516/SB551 now [§10.1-659](#)

- The Director of DCR, jointly with the Director of DOI [DEI], and in coordination with the Chief Resilience Officer (CRO) and Special Assistant to the Governor to Coastal Adaptation and Protection (SACAP) shall prepare a Community Outreach and Engagement Plan for updates to the Virginia Coastal Resilience Master Plan and for development and updates to the Virginia Flood Protection Master Plan (the Plans)
- The outreach and engagement plan shall strive for meaningful involvement by ensuring that
 - affected and vulnerable community residents have access and opportunity to participate in the full cycle of the decision-making process about the development of and updates to the Plans, and
 - decision-makers shall seek out and consider such participation, allowing the views and perspectives of community residents to shape and influence decisions.
- Must be prepared no later than Dec 31, 2022

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

52



Community Outreach and Engagement Plan

2022 GA HB516/SB551 now [§10.1-659](#)

The Department shall seek input to the Community Outreach and Engagement Plan from representatives of:

Virginia Indian Tribes	Community-Based Organizations	The Public Health Sector	Nongovernmental Organizations
Civil Rights Organizations	Communities Impacted by Recurring Flooding	VDEM Equity Working Group	General Public

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

53



Community Outreach and Engagement Plan

Status Update

- **Current Status**
 - DCR Website <https://www.dcr.virginia.gov/dam-safety-and-floodplains/flood-protection-outreach>
 - Individual and Organization Survey (Results Available Online)
 - Internal Development of Draft Community Outreach and Engagement Plan
- **October 2022**
 - Release Draft Community Outreach and Engagement Plan for a 30-day Public Comment via Virginia Regulatory Town Hall
- **December 2022**
 - Final Community Outreach and Engagement Plan Published

9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

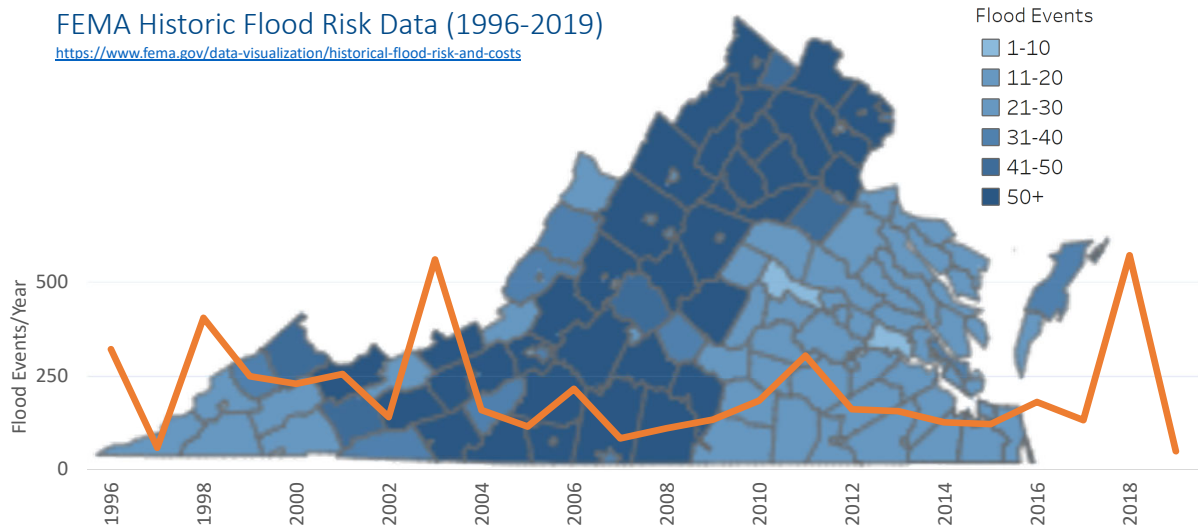
54



Community Outreach and Engagement Plan

FEMA Historic Flood Risk Data (1996-2019)

<https://www.fema.gov/data-visualization/historical-flood-risk-and-costs>



9/16/2022

COASTAL RESILIENCE TAC – DCR UPDATE

55



2022 CRMP TAC Subcommittee Organization

FOR DISCUSSION ONLY

9/16/2022

COASTAL RESILIENCE TAC // FOR DISCUSSION ONLY

1

2022 TAC Members

- **Governors Office**
 - CRO
 - SACAP
 - DOI
 - CDO
- **8 Coastal PDC**
 - A-NPDC
 - Crater PDC
 - GWRC
 - HRPDC
 - MPPDC
 - NNPDC
 - NVRC
 - PlanRVA
- **State**
 - DCR
 - DEQ
 - DHCD
 - Sea Grant
 - VDEM
 - VDOT
 - VMRC
 - VRA
 - VTRC
- **University**
 - VIMS
 - ODU – ICAR
 - W&M – VCPC
 - VT – Coastal Studies
 - UVA – Env. Resilience Institute
- **Tribal**
 - Chickahominy
 - Chickahominy Eastern Division
 - Monacan
 - Nansemond
 - Pamunkey
 - Rappahannock
 - Upper Mattaponi
- **Federal**
 - Navy
 - USACE

9/16/2022

COASTAL RESILIENCE TAC // FOR DISCUSSION ONLY

2

2020 CRMP Framework Goals

HB516/SB551 Codified that TAC shall ensure the Framework is adhered to in future CRMPs.

- 1. Identify and prioritize projects** to increase the resilience of coastal communities, including both built and natural assets at risk due to flooding and sea level rise
- 2. Establish a financing strategy**, informed by regional differences and equity considerations
- 3. Incorporate and promote climate change projections** into Commonwealth's programs addressing coastal adaptation and protection
- 4. Coordinate** state, federal, regional, and local coastal region adaptation and protection efforts

2022 TAC Subcommittees – Mirror Framework Goals

- Project Prioritization
- Funding
- Research and Data
- Outreach and Coordination

2022 TAC Subcommittees

Project Prioritization

Objectives

- Critical built and natural infrastructure inventory
- Develop objective protocols for evaluating and prioritizing identified project needs.
- Develop objective protocols for evaluating and prioritizing project alternatives.
- Identify resilience projects that are underway or planned, and identify resilience gaps and potential solutions based on the best scientific, engineering, and socioeconomic information.

2022 TAC Subcommittees

Funding

Objectives

- Develop a financing strategy that recommends how to leverage and align existing resilience revenue streams to maximize impact, and how to create or tap into new revenue or financing sources.
- Recommend a process by which public and private economic development activity in coastal Virginia, including transportation and other infrastructure projects, can be aligned with the principles and goals of the Coastal Resilience Master Plan.

2022 TAC Subcommittees

Research and Data

Objectives

- Recommendations to effectively incorporate of climate change projections in state and local programs
- Track ongoing research related to coastal resilience
- Provide recommendations to state and local programs on best available data and practices.

9/16/2022

COASTAL RESILIENCE TAC // FOR DISCUSSION ONLY

7

2022 TAC Subcommittees

Outreach and Coordination

Objectives

- Assist in developing and executing a comprehensive outreach strategy to engage coastal communities.
- Strengthen relationships with DOD and other federal facility owners to coordinate and enhance resilience work and accomplish shared goals.
- Strengthen relationships with Tribal Nations to coordinate and enhance resilience work and accomplish shared goals.

9/16/2022

COASTAL RESILIENCE TAC // FOR DISCUSSION ONLY

8

2022 TAC Subcommittees – Discussion

- Project Prioritization
- Funding
- Research and Data
- Outreach and Coordination

Reference

2021 TAC Subcommittees

- **Project Identification:** Identify resilience projects that are underway or planned, and identify resilience gaps and potential solutions based on the best scientific, engineering, and socioeconomic information.
- **Project Evaluation:** Develop objective protocols for evaluating and prioritizing identified projects for inclusion in the Coastal Resilience Master Plan.
- **Finance:** Develop a financing strategy that recommends how to leverage and align existing resilience revenue streams to maximize impact, and how to create or tap into new revenue or financing sources.
- **Community Outreach:** Assist in developing and executing a comprehensive outreach strategy to engage coastal communities – particularly underserved communities – with the public master planning process and gather input to inform the development of tailored and equitable resilience solutions.
- **Studies, Research, and Best Practices:** Track ongoing research related to coastal resilience, recommend additional studies necessary to support the Coastal Resilience Master Plan, provide recommendations on new living shoreline and CBPA rules, strategic coastal relocation handbook, and other best practices materials.
- **Federal Installation Partnerships:** Strengthen relationships with DOD and other federal facility owners to coordinate and enhance resilience work and accomplish shared goals.
- **Aligning Economic Development:** Recommend a process by which public and private economic development activity in coastal Virginia, including transportation and other infrastructure projects, can be aligned with the principles and goals of the Coastal Resilience Master Plan.

REFERENCE DOCUMENTS



THE VIRGINIA COASTAL MASTER PLANNING FRAMEWORK

The Commonwealth of Virginia is pleased to present the Virginia Coastal Master Planning Framework (Framework). This Framework details the core principles of Virginia’s approach to coastal adaptation and protection, and the process by which the Commonwealth will develop and begin implementing Virginia’s first Coastal Resilience Master Plan (Master Plan) by the end of 2021.

The year 2019 was the fifth consecutive year in which the United States suffered 10 or more weather and climate disasters, at an average of 12.6 events per year - more than twice the 40-year average. In 2018-2019, Virginia experienced impacts from nine such events with a total cost of approximately \$1.6 billion.¹ It is clear that much is at stake and significant resources must be allocated to improving resilience across coastal Virginia.

The primary objective of the Master Plan will be to improve the Commonwealth’s resilience and ability to adapt to rising seas, increased nuisance flooding, and more frequent and intense storms that result from climate change and threaten our coastal communities. The Master Plan will include specific projects vetted by resilience experts and prioritized according to state policy goals and regional and local needs.

Specifically, the Framework will guide development of the Master Plan based on guiding principles, goals, regional distinctions, and immediate actions as:

MASTER PLAN GUIDING PRINCIPLES

The Framework lists five guiding principles that will influence the Master Plan and related resilience initiatives:

- Acknowledge climate change and its consequences, and base decision making on the best available science.
- Identify and address socioeconomic inequities and work to enhance equity through coastal adaptation and protection efforts.
- Recognize the importance of protecting and enhancing green infrastructure like natural coastal barriers and fish and wildlife habitat by prioritizing nature-based solutions.
- Utilize community and regional scale planning to the maximum extent possible, seeking region-specific approaches tailored to the needs of individual communities.
- Understand fiscal realities and focus on the most cost-effective solutions for protection and adaptation of our communities, businesses and critical infrastructure.

¹ “U.S. Billion-Dollar Weather and Climate Disasters.” (NOAA National Centers for Environmental Information (NCEI), 2019), <https://www.ncdc.noaa.gov/billions/events/VA/2018>

FRAMEWORK GOALS

The Framework identifies four primary goals that must be achieved prior to the completion of a Master Plan.

- Identification of priority projects to increase the resilience of coastal communities, including both built and natural assets at risk due to sea level rise and flooding
- Establishment of a financing strategy, informed by regional differences and equity considerations, to support execution of the plan
- Effective incorporation of climate change projections into all of the Commonwealth's programs addressing coastal zone built and natural infrastructure at risk due to sea level rise and flooding
- Coordination of all state, federal, regional, and local coastal adaptation and protection efforts in accordance with the guiding principles of this Framework

COASTAL VIRGINIA RESILIENCE PLANNING REGIONS

The Framework divides coastal Virginias into four master planning regions. The Master Plan will identify priority projects within each of the four regions, which reside within the boundaries of the eight coastal Planning District Commissions and Regional Commissions (PDCs/ RCs).

- Hampton Roads (Hampton Roads PDC)
- Rural Coastal Virginia (Accomack-Northampton PDC, Middle Peninsula PDC, Northern Neck PDC)
- Fall Line North (George Washington Regional Commission and Northern Virginia Regional Commission)
- Fall Line South (Crater PDC and PlanRVA- formerly Richmond Regional Planning District)

IMPLEMENTATION – SCALING UP TO CREATE A COASTAL MASTER PLAN

The challenges of sea level rise and coastal flooding are clearly bigger than any one state or federal agency, regional body, or locality can address alone. The Commonwealth must add guidance and capacity, while continuing to encourage the resilience work of coastal communities that have a head start on planning and implementation. To meet that challenge, the Commonwealth will take the following immediate steps as ordered by Executive Actions from Governor Northam:

Establish a Technical Advisory Committee (TAC)

Coastal-wide resilience planning requires coordination among the Commonwealth, local and regional leaders, scientist and engineers, and stakeholders. To facilitate such coordination, and develop recommendations for specific, place-based coastal adaptation and protection strategies, Governor Northam will appoint a Virginia Coastal Resilience Master Plan Technical Advisory Committee. The TAC will assist in the development of Master Plan updates, including a more robust and refined funding and financing strategy.

Elevate the Virginia Coastal Zone Management Program (CZM)

The nature of the TAC's work will require significant administrative and technical support. This will include: decision option identification; stakeholder and advisor input management; data collection and synthesis; and performance monitoring. To meet these needs, we will utilize the CZM Program. The CZM Program is currently housed within DEQ, an appropriate arrangement given the conservation and restoration focus of much of the Program's work. However, CZM also has professional coastal planning expertise that should be applied directly to the master planning process. Therefore, Governor Northam has instructed the Director of the CZM Program to report directly to the Secretary of Natural Resources on matters of coastal adaptation and protection, pursuant to the Secretary's role as Chief Resilience Officer.

Community Engagement Roundtables

Development of the Framework included close coordination with coastal planning districts and regional commissions, conversations with individual localities, and significant input from scientists and an engaged group of stakeholders. In the coming months, the Northam Administration, with assistance from state agencies, will hold a series of community roundtables to introduce the Virginia Coastal Resilience Master Planning Framework. The goal of the roundtables is to gather input on primary issues for citizens who live and work in vulnerable coastal areas.

FOR MORE INFORMATION

- Website: www.naturalresources.virginia.gov/initiatives/resilience/
- Public Comments and email: ResilientCoastVA@governor.virginia.gov



THE VIRGINIA COASTAL RESILIENCE MASTER PLAN

The Commonwealth of Virginia is pleased to present **The Virginia Coastal Resilience Master Plan** ([Master Plan](#)) - an integral document that charts the course to adapt and protect Virginia's Coast.

This first Virginia Coastal Resilience Master Plan is a call to action for the Commonwealth. From growing cities to migrating coastal wetlands, Virginia's coast faces a new reality. As sea levels rise and severe weather intensifies, climate change is threatening our cherished coastal regions' economic, cultural, and environmental resources

Nearly six million people, or 70% of the state's population, call coastal Virginia home.¹ Our coastal regions contain flourishing economic sectors, important cultural and historical assets, and diverse communities and natural features. But we face a growing threat. Between rising sea levels and changing precipitation patterns, Virginia has already recorded changes to the frequency and intensity of floods that pose increasingly greater risks to our communities.

And while flooding impacts all Virginians, it does not affect all Virginians equally. Many communities lack the resources to combat these increasingly prevalent threats.

WHAT WE'VE DONE

The Master Plan builds on the [2020 Virginia Coastal Resilience Master Planning Framework](#), which outlined core principles and goals of Virginia's coastal resilience strategy. Given the urgency around the issue of coastal flooding and sea level rise, the Master Plan focused on the impacts of tidal and storm surge flooding on coastal Virginia.

The Master Plan leveraged the combined efforts of more than two thousand stakeholders, subject matter experts, and government personnel. Development of this plan centered around three core components:

- A Technical Study compiled essential data, research, processes, products, and resilience efforts in the Coastal Resilience Database, which forms much of basis of this plan and the Coastal Resilience Web Explorer;
- A Technical Advisory Committee (TAC) supported coordination across key stakeholders and ensured the incorporation of the best available subject matter knowledge, data, and methods into this plan; and
- Stakeholder Engagement captured diverse resilience perspectives from residents, local and regional officials, and other stakeholders across Virginia's coastal communities to drive regionally specific resilience priorities.

NOTABLE FINDINGS FROM THE TECHNICAL STUDY'S IMPACT ASSESSMENT - BETWEEN 2020 AND 2080...

- The number of residents living in homes exposed to major coastal flooding is projected to grow from approximately 360,000 to 943,000, an increase of 160%.
- The number of residential, public, and commercial buildings exposed to an extreme coastal flood is projected to increase by almost 150%, from 140,000 to 340,000, while annualized flood damages increase by 1,300% from \$0.4 to \$5.1 billion.
- The number of miles of roadways exposed to chronic coastal flooding is projected to increase from 500 to nearly 2,800 miles, an increase of nearly 460%.
- An estimated 170,000 acres, or 89%, of existing tidal wetlands and 3,800 acres, or 38%, of existing dunes and beaches may be permanently inundated, effectively lost to open water.

ACTIONS AND NEXT STEPS

With the aid of regions and localities, the Commonwealth compiled over 500 capacity building initiatives and existing projects in a Coast-wide publicly accessible [Coastal Resilience Database](#). Capacity building initiatives include forming the information, skills, and tools to assist regions and localities as they prepare and plan to adapt to coastal hazards. Adaptation projects, alternatively, are planned, under design, or in-progress work using a variety of methods and solutions, including natural and nature-based, structural and hybrid – a combination of several methods.

Funding for projects may come from the [Virginia Community Flood Preparedness Fund](#), or from other sources. The Coastal Resilience Database includes a [funding source database](#), built from work sponsored by the Virginia Coastal Zone Management Program, which matches projects to potential federal, state, local and other funding opportunities.

Over the course of the past year, we have learned how essential this work is and how much more there is to do. While Phase One of the Master Plan will be foundational for creating a more resilient Virginia, there is a need to continue to adapt using additional information, data, outreach and analysis. Phase Two of the Master Plan, planned for completion in 2024, will improve and expand on rainfall and riverine hazard assessments, data collection, project planning and prioritization, and outreach and engagement of under resourced communities.

The Commonwealth expects to update the Master Plan every five years. Implementation of the Master Plan will be managed by the Department of Conservation and Recreation in consultation with the TAC, and with guidance and support from the Chief Resilience Officer and the Special Assistant for Coastal Adaptation and Protection.

INFORMATION WILL BE AVAILABLE IN THE FOLLOWING MEDIUMS

- Website: <https://www.dcr.virginia.gov/crmp/plan>
- Public Comments and email: flood.resilience@dcr.virginia.gov

¹ U.S. Census Bureau. (2020). Annual Estimates of the Resident Population for Counties in Virginia: April 1, 2010 to July 1, 2019 (Release Date: March 2020) [CO-EST2019-ANNRES-51]. U.S. Census Bureau, Population Division

Coastal Resilience TAC

Key Acronym Reference

- COEP Community Outreach and Engagement Plan
- CRMP Virginia Coastal Resilience Master Plan
- CRO Chief Resilience Officer
- Framework Coastal Resilience Master Planning Framework
- Plans Virginia CRMP and VFPMP
- RAFT Resilience Adaptation and Feasibility Tool
- SACAP Special Assistant to the Governor for Coastal Adaptation and Protection
- TAC Coastal Resilience Technical Advisory Committee
- VFPMP Virginia Flood Protection Master Plan