Virginia Coastal Resilience Technical Advisory Committee (TAC)

Subject	TAC Meeting 2022-Q4	Date	12/01/22
Chair	DCR Director Matt Wells	Time	9:00am
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
John Bateman	Senior Regional Planner Northern Neck Planning District Commission (NNPDC)	Y
Jill Bieri	Director, Volgenau Virginia Coastal Reserve The Nature Conservancy (TNC)	V
Chip Boyles	Executive Director George 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
Martin Brown [Michael Perez]	Chief Diversity, Opportunity, and Inclusion Officer [Special Assistant] Office of Diversity, Opportunity, and Inclusion (ODOI)	[Y]
Kristin Burhop	Vice President for Public Policy and Legislative Affairs VA Chamber of Commerce	
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 [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 [Curt Smith]	Executive Director [Deputy Director] Middle Peninsula Planning District Commission (MPPDC)	Y [Y]
Dr. Mark Luckenbach	Associate Dean for Research and Advisory Services Virginia Institute of Marine Science (VIMS)	Y
Keith Martin	Executive Vice President, Public Policy and Government Relations VA Chamber of Commerce	
Dr. Karen McGlathery	Director of the Environmental Resilience Institute University of Virginia (UVA)	
Martha Moore	Senior Vice President Governmental Relations Virginia Farm Bureau	
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
Mary-Carson Stiff	Policy Director Wetlands Watch	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 [Y]
Reggie Tupponce	Tribal Administrator Upper Mattaponi Indian Tribe (Upper Mattaponi)	
Brett Vassey	President & CEO Virginia Manufacturers Association	

Cathie Vick	Chief Development and Public Affairs Officer Virginia Port Authority	
Travis Voyles	Secretary of Natural and Historic Resources, Chief Resilience Officer (SNHR/CRO)	
Dr. Robert Weiss [Dr. Wendy Stout]	Director of the Center for Coastal Studies [Coastal Resilience Extension Specialist] Virginia Tech (VT)	Y
Matt Wells (Chair)	Director, Chief Resilience Officer (CRO) via delegated authority 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)	V

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)	
Corey Scott	Assistant Secretary of Natural and Historic Resources (SNHR)	
Andrew Smith	Deputy Director (DCR)	Y

Attendees		
Name (In-Person)	**Name (Virtual)**	**Name (Virtual)**
Ethan Betterton (VA Chamber of Commerce)	Brian Batten	Jessica Lassetter
Angel Deen (VDOT)	Michael Battle	Elizabeth Lonoff
Jay Ford (CBF)	Jill Bieri (TNC)	Grace Loudermilk
Maria Mutuc (VDOT)	Pamela Brandy	Laura McKay
Stu Geiger (Dewberry)	Morgan Butler	Doug Moseley
Robert Mariz (HRSD)	Rebekah Cazares	Deborah Murray
Jerry Sparks (Dewberry)	Joan Curry	Vic Nicholls

Grace Tucker (EDF)	Alex Foraste	John Paine
Will Isenberg (VA CZM)	Adam Gold	Taylor Parker
Emily Sheinhilber (EDF)	James Haluska	Rachael Peabody
Tom Dunlap (JRA)	Andrea Hasenfus	Henry Pollard
Ben Nettleton (VMRC)	Gretchen Heal	Ed Reed
Wendy Start (VT)	Carolyn Heaps-Pecaro	Roderick Scott
Erin Reilly (JRA)	Judith Hinch	Mathew Simons
	Allison Homer	Scott Smith
	Joseph Howell	Chris Stone
	William Jennings	Emily Torrey
	Arthur Kay	Charlie Westbrook
	Meredith Keppel	Wendy Howard-Cooper
	Eleanor Kluegel	

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/20221201-tac-agenda-0-1.pdf
Meeting Handouts/Presentation Slides	https://www.dcr.virginia.gov/crmp/meeting/document/20221201-tac-dcr-update-handout.pdf
Video Recording of the Meeting	https://www.youtube.com/watch?v=tEXVwDUQk3k

Agenda Item	Minutes
1. Call to Order, Roll Call, Introductions	Wells Opening Remarks, reminder the scope of this group is Coastal Resilience Master Plan (CRMP) and may receive Virginia Flood Protection Master Plan (Statewide Plan) questions. Committed to four areas of: addressing flooding resilience challenges, programs that work for all of Virginia, that we all have to work together, and the program plans have transparency and input from the public. Noted that online was TAC member Jill Bieri and TAC advisor Joe Howell.
2. Adoption of Meeting Minutes from September 16, 2022	Multiple motions to pass September 2022 meeting minutes. Multiple motions to second. Minutes passed unanimously by verbal vote.
3. Reports from DCR	Presented by Matt Dalon (DCR), unless noted otherwise. Comments by others are noted. Italics indicate where discussions took place in the presentations. a. **Virginia Coastal Resilience Master Plan Update** Dewberry Contract- Adding ability to add own projects to the online database and add funding sources. Moving forward with pluvial modeling – likely start in January

of 2023. DCR has other efforts going on as well. Dewberry contract does not complete Phase II, so a discussion is needed about what will be accomplished in Phase II.

b. **Summary of Feedback on Framework and CRMP Phase I**

TAC member survey and public comment input. Principles

Wells thanked everyone who provided thoughtful comments on the Framework and Phase II. Noted areas that need more exploration and the intention to send them out to subcommittees to consider them.

Andrews (W&M) questioned best available science vs data.

Branosky (DEQ) commented on value of having a definition of nature-based solutions

Ruffa (Crater PDC) asked if we are going to have a way to discuss these issues more in depth.

Wells commented we will probably be sending them to subcommittees. So, yes.

Master Planning Regions – Largest split in responses.

Timelines –

Weiss (VT) commented best available data sometimes do not match up. They need to be treated in ways that make them possible to use for decision making. To follow the guiding principles, but also need to employ quantitative science.

Dalon commented that yes, different levels of decisions, have different usages for the data.

Wells commented there are areas where the science is not there, we don't have the data. So where do we make investments to make useable and actionable data?

Weiss commented science should always be made actionable.

CRMP Phase I Outreach and Engagement -

Bateman (NNPDC) commented not all projects are planned in advance. Thought not to knock a project because they did not have this advanced planning.

Branosky (DEQ) commented that hundreds of projects are done to improve water quality, but they also provide flood plain benefits. We are tracking that for regulatory reasons. Could be useful to coordinate between those databases and not duplicate databases that is already doing water quality projects.

Ruffa (Crater PDC) commented that sometimes locality don't know of the VDOT projects happening in their region. And they don't know why it is happening. As a locality, don't know how the state is handling it.

Branosky (DEQ) commented that DEQ has to track progress for Chesapeake Bay goal. If locality installs a project with water quality benefits, the state would want to know about it even if water quality isn't the main point. But the vice versa where a

little scoping could increase floodplain benefits from a water quality focused project.

Wells commented that there is a responsibility to inform others of projects that are happening.

Swanson (VDOT) noted the release of a VDOT resilience plan yesterday that speaks to the need to coordinate. Also, the need to identify who is leading coordination efforts.

Wells commented that it could be interesting to the TAC to have someone present on these items. Trying to get ahead of those efforts with planning for floodplain management.

Ruffa (Crater PDC) commented that they didn't know a project was happening in Chesterfield before it was already well along.

Wells noted that while personal relationships and communication were good, we should get past personal relationships and institutionalize relationships for these coordination efforts to be maintained.

Plan Delivery-

Well asked if there were any other comments and thanked Matt Dalon and the DCR team for compiling these answers into something shorter and easier to digest.

Phase II-

Swanson (VDOT) commented that designating an authoritative data source would be helpful, but sometimes data is not even there. So, how do we move forward with establishing an authoritative data source for data that does not exist?

Status of Flood Resilience –

Katchmark (HRPDC) commented on the difference in where people are in addressing issues from not evening knowing how to address to the problem to having a designed project.

Dalon commented on levels of awareness and capacity varying across the region from some people not evening knowing about flooding issues to some that have a design to others who just don't know how to implement a solution.

Dalon questioned how can this information be captured of what we are doing for this needs assessment? DCR doesn't own the assets and we don't own the projects to gather the information for the overall status.

Stiff (Wetlands Watch) commented that the impacts are being assessed based on the new data that Dewberry did in Phase I. She thought the risk assessment is more critical. Not sure how to do that. But we should know that the impacts are. What we do not have is a consensus/plan on what is critical and to whom?

Dalon agreed that getting to the criticality of these items was important.

Stiff (Wetlands Watch) asked if then a different term should be used?

Dalon agreed that the definition of "critical" was important but still undetermined.

Sutton (VDEM) noted they track critical infrastructure already as it relates to emergency management, for safety and security.

Dalon commented like FEMA lifelines, there are a lot of ways to define "critical."

Bateman (NNPDC) commented needs assessment was critical, but only happens on five-year basis for the Hazard Mitigation Plan (HMP). It is important to prioritize what is most at risk and that would take the guess work out of things.

Dalon asked should we make people redo risk assessments they've already done?

Stiff (Wetlands Watch) asked if the state was going to review the HMPs of each region and determine for example, what Northern Neck sees as critical?

Andrews (W&M) asked what is the process? Critical infrastructure defined by code. How does that tie into the subcommittee work?

Dalon replied those are the questions we are trying to answer.

Wells added this can be added to the subcommittees.

Stewart (PlanRVA) commented they were just awarded a grant to look at these questions. Noted that caution should be used when looking at just HMP because that wasn't the purpose, but it can be something to be used. This had been discussed in their region.

Wells commented he thinks there needs to be a lot of coordination with plans and moving forward. That is why we highlight the iterative nature of the process. It is a bi-annual report.

Katchmark (HRPDC) commented Phase I could have had a section that lays out what areas that were not gotten to.

Wells noted a needs assessment gap analysis may be a better way to deal with that.

CRMP Objectives –

Andrews (W&M) commented that the discussion had not covered instances where the data says some areas are much more at risk versus others. Has there been equity been considered in this? Some areas are much more built out vs others?

Steelman (A-NPDC) noted that also the historically disadvantaged communities have not been discussed. Historically disadvantaged areas continue to be historically disadvantaged if we only focus on geography of an area.

Andrews (W&M) asked if a certain geographic distribution of work was wanted for equity? So as to not have all resources one area. Just because data say something, what about the equity issue in this?

Wells commented we do not want to shut anyone out.

Andrews (W&M) requested to view a full TAC list to see who may be accidentally left out.

It was noted that Joe Howell (Navy) was an advisor.

Whitehead (ODC ICAR) commented that the projects are dealing with places already at risk. Rural areas have urbanization pressure. How are we supporting

PDCs that are not urbanizing in areas that have future risk? That should be in the framework.

Branosky (DEQ) commented he was hearing weighting factors of things for prioritization. He also noted placements of projects can impact property values and the cost of flood insurance.

Luckenbach (VIMS) noted the last report did have some equity discussions/agreement. But that did not mean that for example Norfolk's most important project is more important that Accomack's most important project.

Wells commented he sees a need for a plan to evaluate Flood Fund applications. And other comments made had good points.

Stiff (Wetlands Watch) commented it sounds like we talked about these issues, but they weren't institutionalized. This evolves the discussion.

Andrews (W&M) agreed.

The plan will include…-

Wells noted that he had thoughts/reactions after the fact. He encouraged the TAC members to feel free to let DCR know any after the fact thoughts or reactions to this presentation after this meeting. But he noted to do remember FIOA requirements when discussing these topics outside the TAC meetings.

c. **Community Outreach and Engagement Plan Update**

Wells presented this.

Plan to make this a framework and living document as the CRMP and the Statewide plan is developed too.

Plan to use a whole community approach for the COEP. What are some of the ways we are getting outside of this room? We are required to consult several stakeholders.

Goal is to leverage external support. Whether that is a contractor or third parties to do it or both is not decided. Structured for external parties to say how they think they can accomplish this.

d. **Summary of Feedback on TAC Subcommittees**

Plan to mirror framework goals and narrow down the number of subcommittees. So, sticking with four subcommittees.

Wells commented that public policy is expected to be discussed within the other subcommittees and ad hoc groups can be created.

Next Steps –

Wells commented we will take things that came up today and send them around. If there are specific things that the subcommittee should explore, we will include that in the survey.

	Andrews (W&M) commented on the Funding slide, first objective seems straight forward, bit "What are VA's specific desired outcomes" seems too large for this subcommittee.
	Dalon clarified that the subcommittee would look to find funding that supported what already (but as yet not) specific desired outcomes were. That would not be the work of the subcommittee.
	Andrews (W&M) restated this as someone else will already define the desired outcomes, but the subcommittee would work to find ways to achieve them.
	Hartley (Sea Grant) commented that roles and functions of responsibilities for issues that will have cross-pollination needs, examples like equity and nature-based solutions will touch multiple subcommittees. How far in the conversation can you go within subcommittees?
	Wells replied that subcommittees with be expected to report out to the full TAC so others are aware of that is going on.
	Sutton (VDEM) noted that all revenue streams should be considered not just the presented state and federal streams.
	Hartley (Sea Grant) in reply to Wells noted that these conversations happen in real time and might not be capture well in a report out.
	Wells commented he agreed with that, as we talk but we need to stay within our FOIA requirements.
4. Old Business	None had.
5. New Business	No new business was raised.
6. Public Comment	Wells noted as per charter public comments was designated for 20 mins and each speaker was to have five minutes.
	No virtual public comments.
	Jay Ford with Chesapeake Bay Foundation commented on how outreach and engagement is about who is not in the room. Why don't they have representation? Equity seemed to have a narrow definition in the TAC discussions. Seems focused on locality but what about communities that rate low because of environmental justice issues that will not be high priorities even to localities? That perspective should have a seat in this room. The previous TAC had identified it as an issue but the presently formed TAC has not yet.
7. Adjourn	Wells commented next TAC meeting was TBD but hoped the location would be outside Richmond.
	Stiff (Wetlands Watch) asked on when the public comment period for the community outreach and engagement document would be and if another venue to discuss it would be provided.
	Wells replied just the public comment period was expected to be used for that.
	Meeting Adjourn around 10:50am.

Voting Records

Motion to accept September 2022 TAC meeting minutes. 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

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Virginia Coastal Resilience Technical Advisory Committee
Quarterly TAC Meeting Agenda

Date: Thursday, December 01, 2022

Time: 09:00 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/7735530920838210573

Meeting Agenda

1) Call to Order, Roll Call, and Introductions

2) Adoption of Meeting Minutes from September 16, 2022

3) Reports from DCR

    a. Virginia Coastal Resilience Master Plan Update

    b. Summary of Feedback on Framework and CRMP Phase I

    c. Community Outreach and Engagement Plan Update

    d. Summary of Feedback on TAC Subcommittees

4) Old Business

    a. TAC Member Discussion

5) New Business

    a. TAC Member Discussion

6) Public Comment

7) Adjourn

Public Comment: If you seek to provide public comment, please sign up either in-person or virtually using the Chat window.

Coastal Resilience TAC

DCR Update 12/01/2022

Presentation Outline

- Coastal Resilience Master Plan Update
- Summary of Feedback TAC and Public Comments
  - Framework
  - CRMP Phase I
  - CRMP Phase II
- Community Outreach and Engagement Plan Update
- Summary of TAC Feedback on Subcommittees

Virginia Coastal Resilience Master Plan Update

Coastal Resilience Master Plan Update

Phase 2 Code 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]

Coastal Resilience Master Plan Update

Phase 2 Status Update

- Dewberry Contract
  - Project Database Web Application
  - Funding Database Web Application
  - Pluvial Modeling
  - *Updated Impact Assessment*
  - *Updated Impact Assessment Report*
  - *Updated Web Explorer*

- Additional DCR Efforts
  - Community Outreach and Engagement Plan
  - Status of Flood Resilience Report
  - Annual Coordination Meetings
  - Resilience Coordination Workgroup
  - Virginia Flood Protection Master Plan

CRMP
Framework, Phase I, & Phase II

Summary of TAC and Public Comments

Solicitation of Input

TAC Member Survey

- Framework
  - Principles
  - Goals
  - Master Planning Regions
  - Time Horizons
- Coastal Resilience Master Plan, Phase I
  - Outreach and Engagement
  - Technical Study Components
  - Plan Delivery
- Coastal Resilience Master Plan, Phase II

Public Comment via Virginia Town Hall

- Documents for Comment
  - Master Planning Framework
  - Coastal Resilience Master Plan, Phase I
- Outreach Awareness via
  - News Release
  - Social Media
  - Direct Email

Responses

TAC Member Survey

Did you participate in the 2021 CRMP TAC?

14 responses

- Yes
- No

21.4%

78.6%
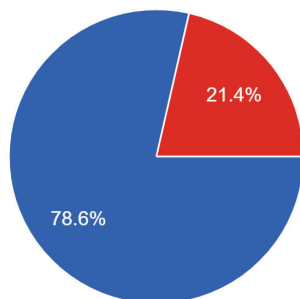
Public Comment

- Framework
  - 7 Comments
- CRMP Phase I
  - 11 Comments

- Individuals, Localities, PDCs, NGOs

Coastal Resilience
Master Planning Framework
TAC and Public Comments

Framework Discussion

TAC and Public Comment Summary

- Principles
  - Supportive
  - Additional clarity for implementation
- Goals
  - Supportive
  - Additional clarity and interim steps needed
- Master Planning Regions
  - Statewide Integration
- Time Horizons
  - Major Flood Hazards Integration

Framework Principles

TAC Survey - Do you agree with the Framework Principles?
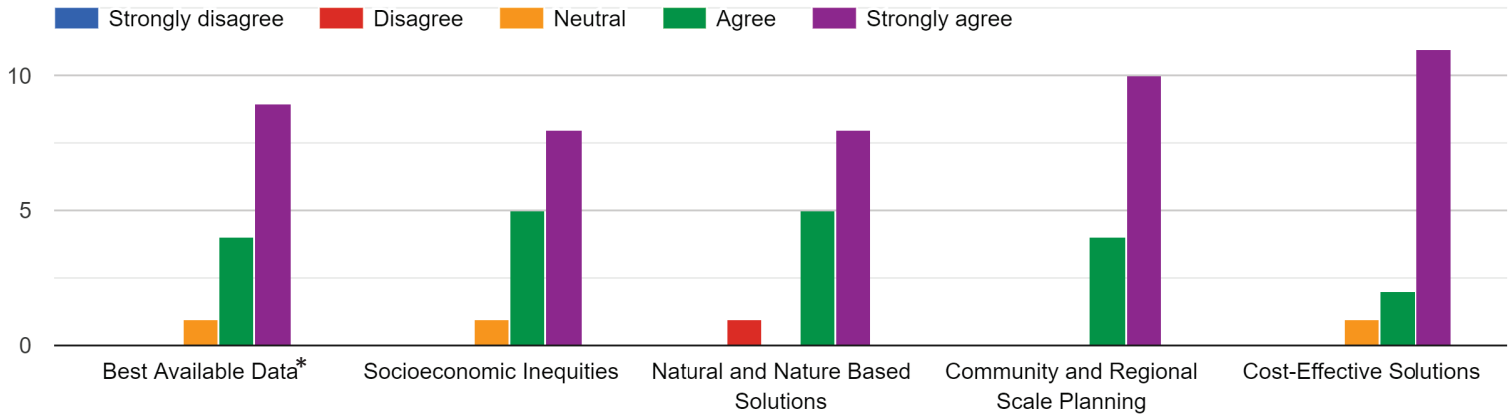
Framework Principles

TAC and Public Comments

- Best Available Science vs Best Available Data

- Equity: Objective vs Co-Benefit

- Natural and Nature Based: Assets vs Solutions

- Community and Regional Scale Planning vs Private Property

- Cost Effective: Direct vs Indirect

Framework Goals
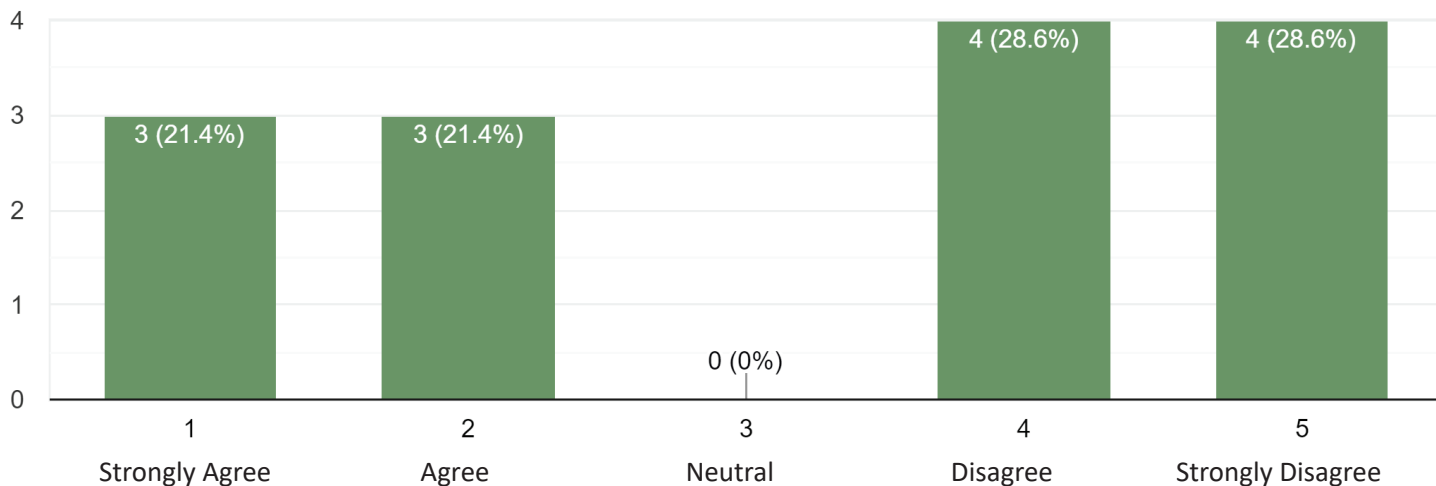
TAC Survey - Do you agree with the Framework Goals?
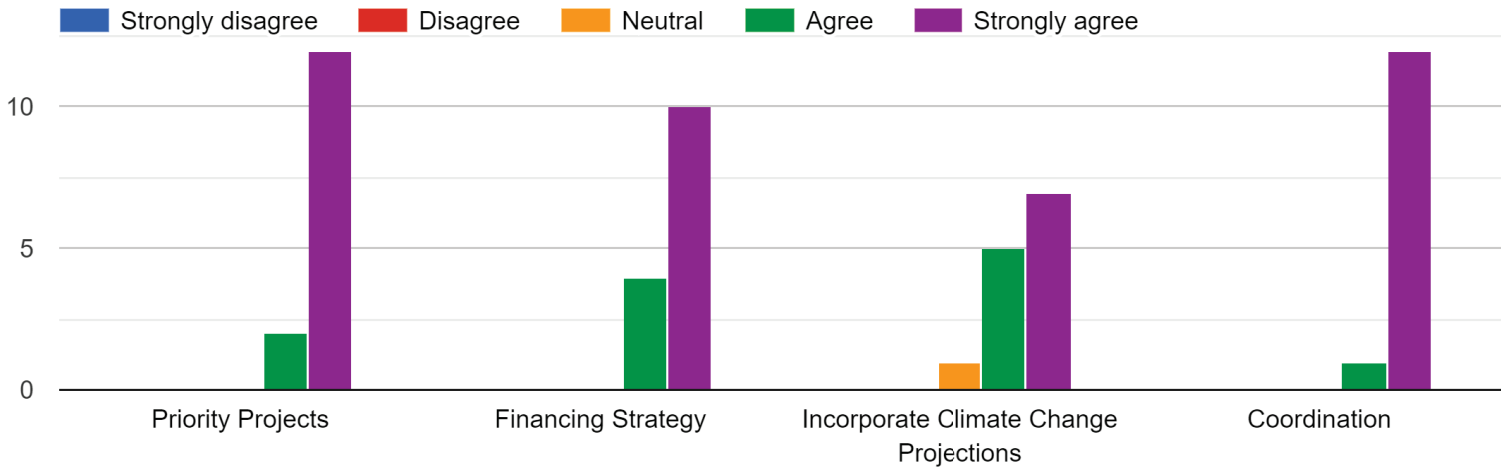
Framework Goals

TAC and Public Comments

- Priority Projects
  - Critical Infrastructure & Vulnerable Communities
  - Commonwealth vs Region vs Local vs Organizations vs Individual
  - Projects vs Programs
  - Needs vs Solutions
- Funding
  - Communication, Coordination, and Collaboration

- Incorporate Climate Change Projections in Commonwealth Programs
  - Adaptive Management
  - Regional and Local Program Integration
- Coordination
  - Resilience Must Align and Work Across Borders. Whole Community.
  - Programs. Regulations. Legislation.
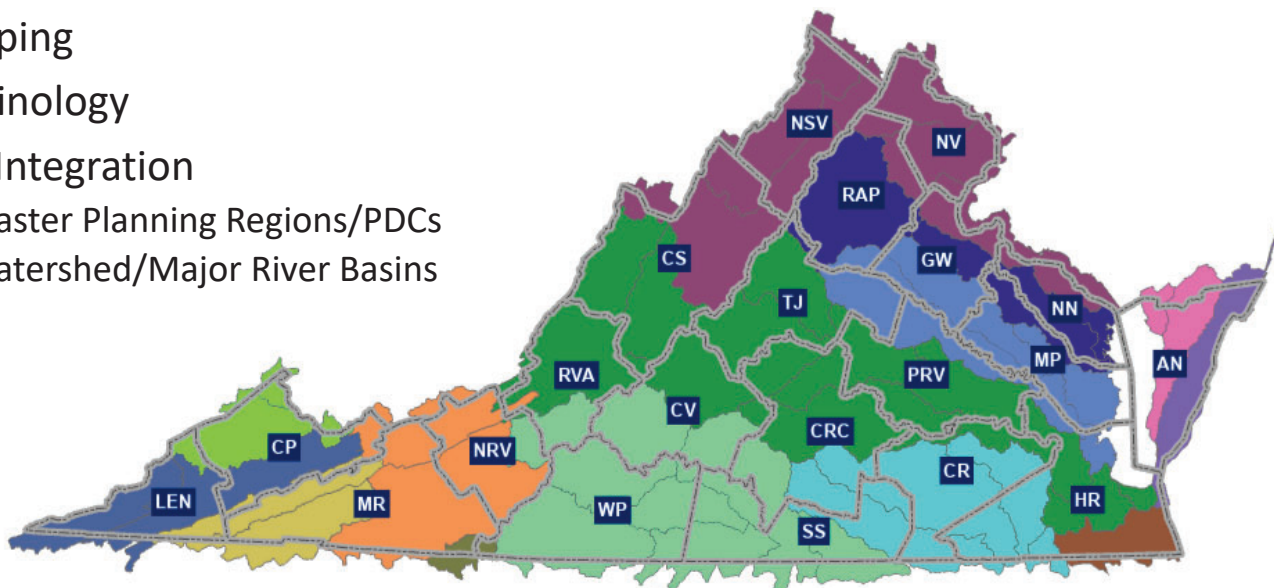 - Communication

Master Planning Regions

TAC Survey - Do you agree with the organization of the Plan according to the Master Planning regions?
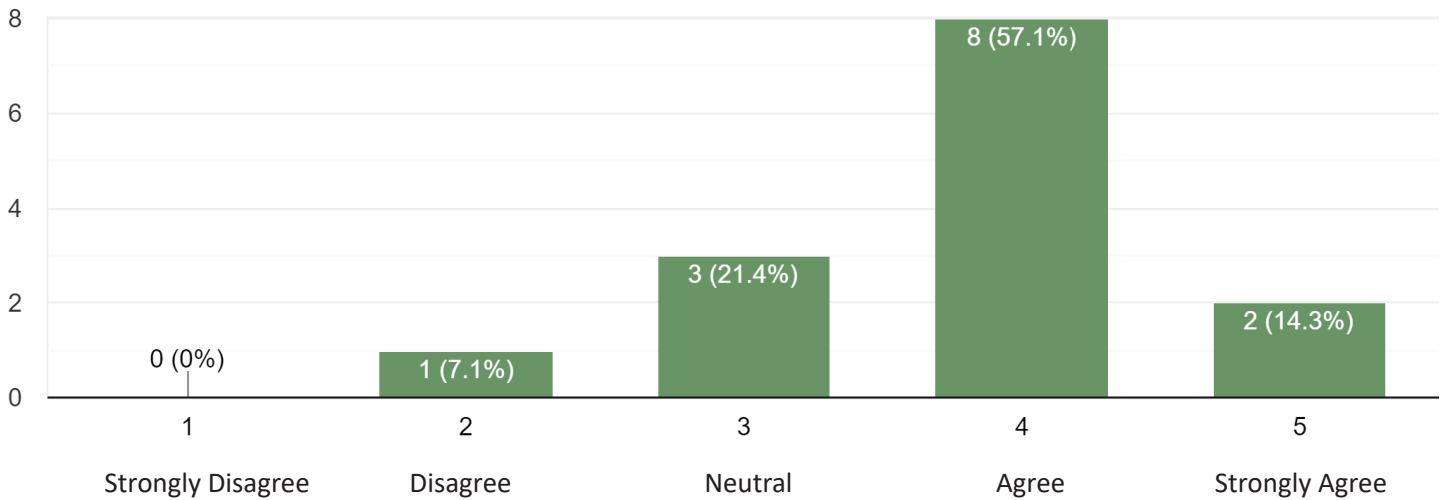
Planning Areas

TAC and Public Comments

- Grouping
- Terminology
- Plan Integration
  - Master Planning Regions/PDCs
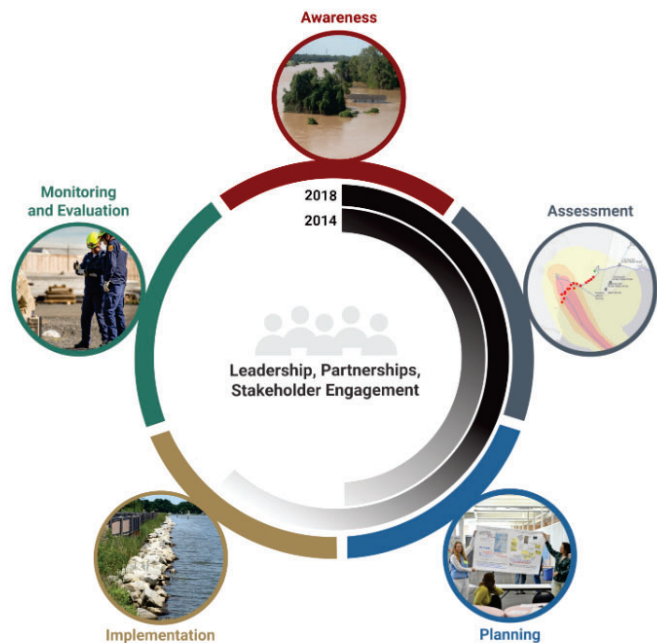 - Watershed/Major River Basins

Framework Time Horizons

TAC Survey - Do you agree with the Plan planning time horizons (2020, 2040, 2060, 2080)?

0 (0%)	1 (7.1%)	3 (21.4%)	8 (57.1%)	2 (14.3%)
1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

National Climate Assessment Progression

This is a continuous process without an end point.

Each cycle,
we update and advance.

Source: NCA 2018

Planning Scenarios

Major Flood Hazard Integration

- CRMP Flood Scenario: function of time & location
- Integrating Major Flood Hazards
  - Sea Level Rise – Location Specific at 2020, 2040, 2060, 2080, 2100
  - Predictive IDF – County Specific at 2020-2070 and 2050-2100
  - Riverine Discharge – Unknown (River Specific?)
  - Compound Flooding
- Simplified Approach for Planning Purposes?
  - 2025, 2050, 2100
  - +3ft, +5 ft
  - Watershed/Locality

Coastal

Fluvial

Pluvial
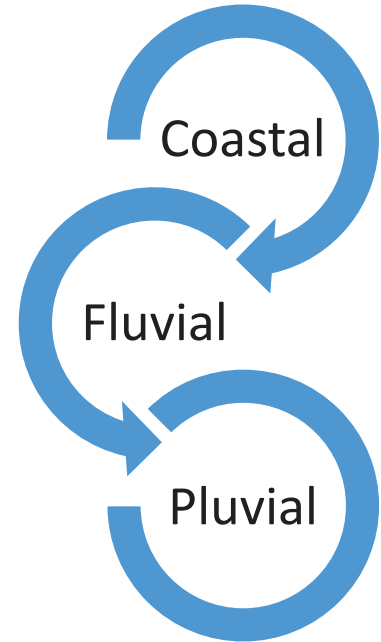
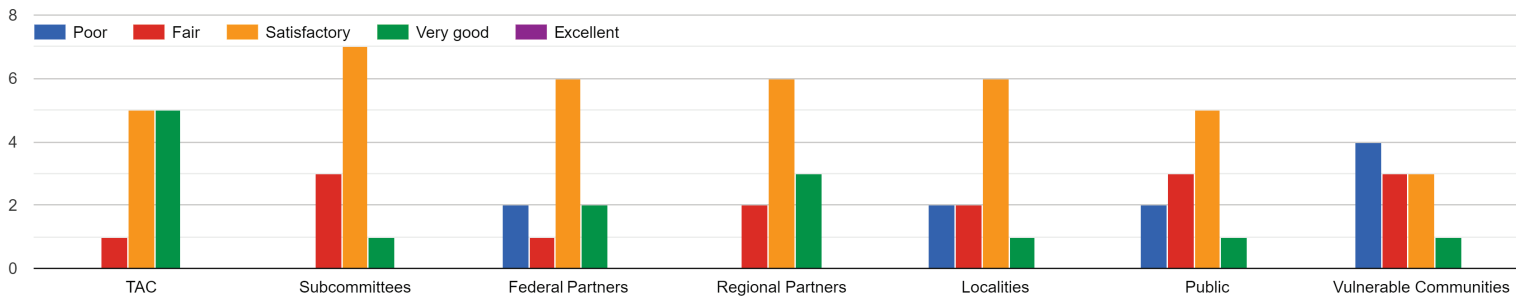# Coastal Resilience Master Plan Phase I

TAC and Public Comments

CRMP Phase I

TAC and Public Comment Summary

- Outreach and Engagement
  - Improvements Needed
- Technical Study
  - All Major Flood Hazards
  - Critical Human and Natural Infrastructure
- Plan Delivery
  - Statewide Integration

CRMP Phase I, Outreach and Engagement

TAC Survey - Outreach and Engagement Rating

CRMP Phase I, Outreach and Engagement

TAC and Public Comments

- Improve Communication, Coordination, and Collaboration

- Support Community Led Planning Efforts

  - Identify Community Needs

  - Providing Resources to Communities

  - Collecting and Sharing Community Data

  - Combining CRMP and CFPF Outreach

- Communicate a Path Forward

CRMP Phase I, Technical Study

## TAC Survey – Technical Study Ratings
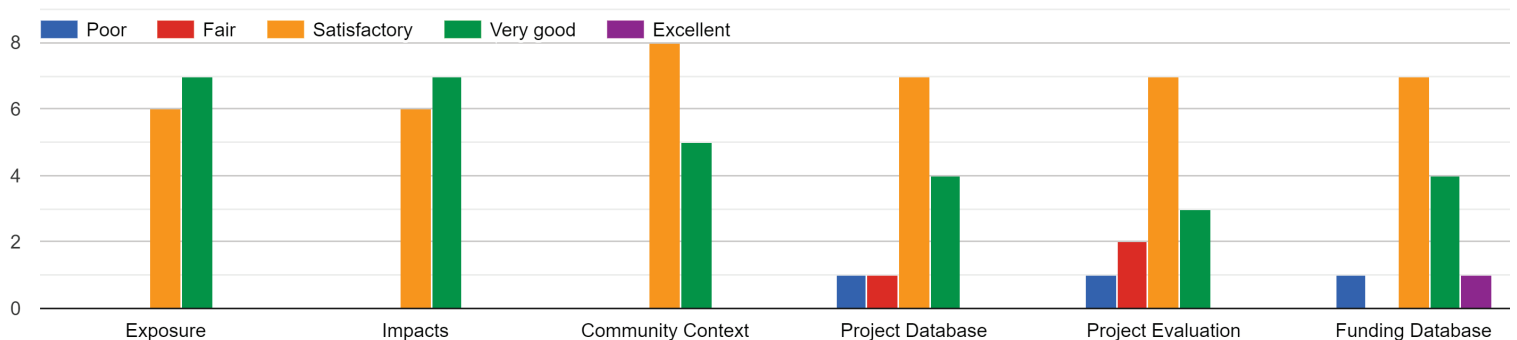
CRMP Phase I, Technical Study

TAC and Public Comments

- Other Major Flood Hazards
  - Pluvial Flooding
  - Fluvial Flooding
  - Compound Flooding
- Critical Infrastructure Includes Natural and Nature Based Systems
- Impacts to Natural Infrastructure
- Project Database is not Inclusive of all Projects
- Project and Funding Database Purpose/Benefit

CRMP Phase I, Plan Delivery

TAC Survey - Plan Delivery Rating
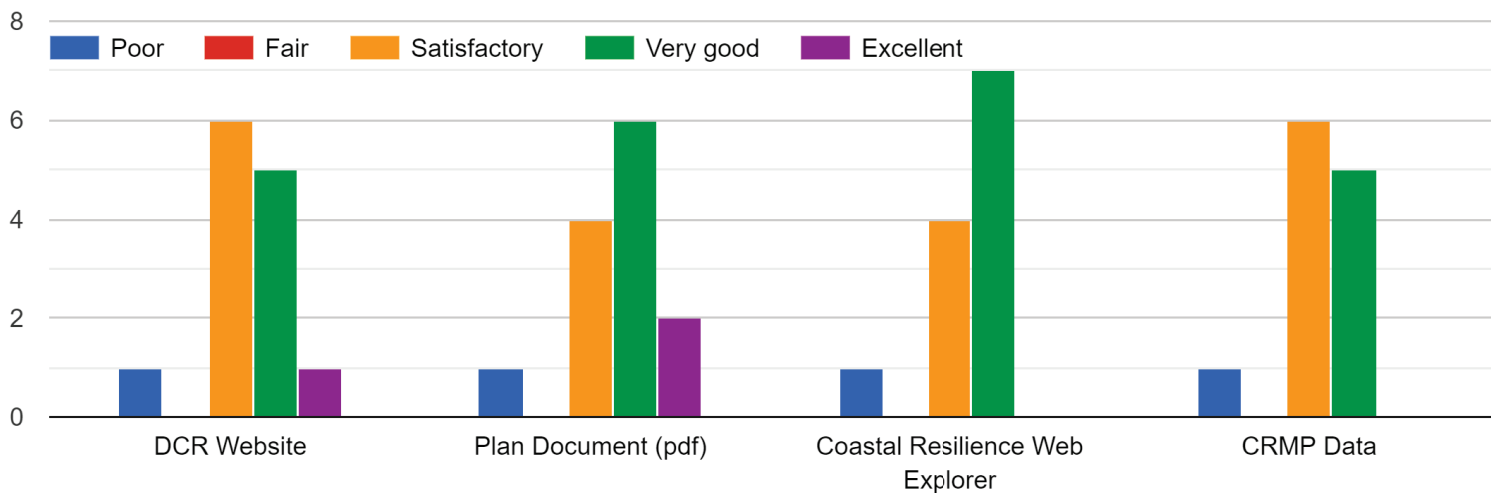
CRMP Phase I, Plan Delivery

TAC and Public Comments

- End User
  - Public vs Practitioner
- Schedule
- Defining the End Product
- Integration with Statewide Plan
- Consider 2021 TAC Recommendations

# Coastal Resilience Master Plan
Phase II

CRMP Phase II

- Technical Study
  - Exposure (Pluvial, Fluvial, Compound Flooding, Erosion)
  - Impacts (Environmental Assessment)
- Coordination
  - Resilience Data Catalog
  - Asset Owners (Public and Private)
  - CFPF & CRMP
- Statewide Integration
- Funding
- Implementing Resilience at State and Local Levels
- Community Planning

Flood Resilience Planning – Paths to Success

Providing communities what they need to succeed.
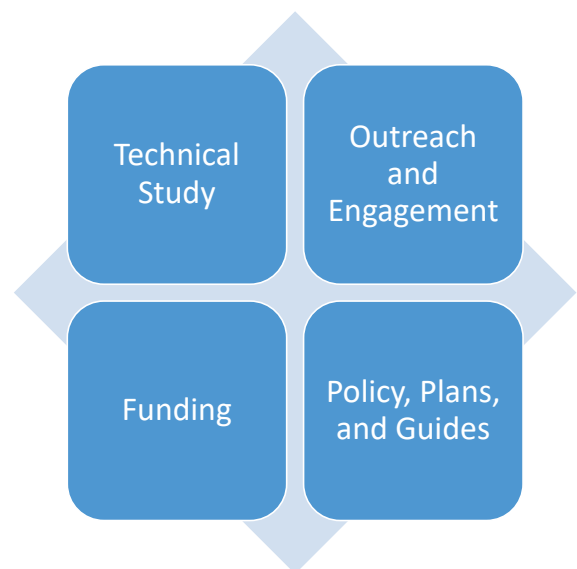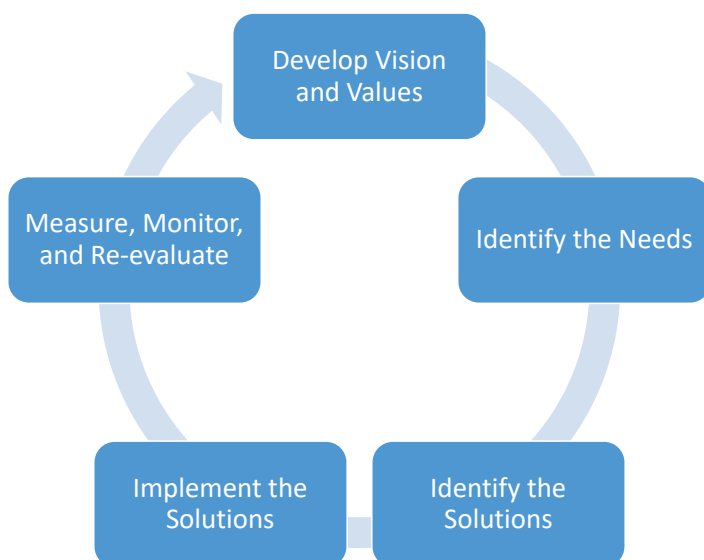
CRMP Phase II

## Code Requirements

- 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]

CRMP Phase II – Major Flood Hazards

Current and Potential(+) Investments for Phase II

- Coastal Flooding
  - + Adopt 2022 SLR Projections
  - + Update Exposure & Impacts
- Pluvial Flooding
  - Contracted, Work Starting 2023
- Fluvial Flooding
  - + Leverage FEMA Data for Existing Exposure and Impacts
  - + Future Fluvial Exposure and Impacts
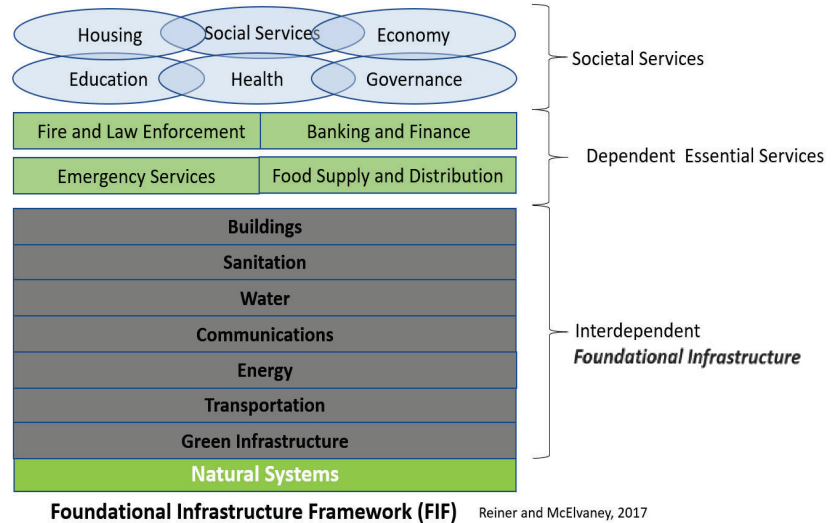- Compound Flooding
  - + Historical Analysis
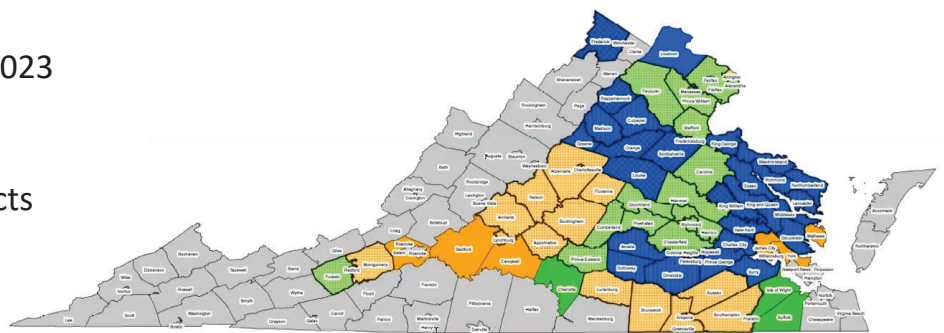
VFRIS Data Organization Status as of August 31, 2022

CRMP Phase II - Comprehensive Assessment

System of Systems with Interdependencies and Colocation

Status of Flood Resilience Report

- Natural Infrastructure

- Human Infrastructure

- Critical Infrastructure

  - Transportation

  - Energy

  - Communication

  - Water and Food Supply

  - Waste Management

  - Health

  - Emergency Services

| Housing | Social Services | Economy | | Societal Services |
| Education | Health | Governance | | |

| Fire and Law Enforcement | Banking and Finance | Dependent Essential Services |
| Emergency Services | Food Supply and Distribution | |

Buildings
Sanitation
Water
Communications — Interdependent *Foundational Infrastructure*
Energy
Transportation
Green Infrastructure
Natural Systems

Foundational Infrastructure Framework (FIF) Reiner and McElvaney, 2017

[2022 GA HB517 now §2.2-220.5]

CRMP Phase II - Status of Flood Resilience

Status of Flood Resilience Report (Bi-Annual starting 7/1/23) will Establish a Framework for

- Critical, Human, and Natural Infrastructure Assessment
  - + Impacts Assessment from Major Flood Hazards
- Status of Flood Resilience Planning in the Commonwealth
  - + Flood Resilience Needs Assessment
    - Regions and Localities
    - State Agencies
    - Critical Asset Owners (Public and Private)

CRMP Phase II – Project Updates

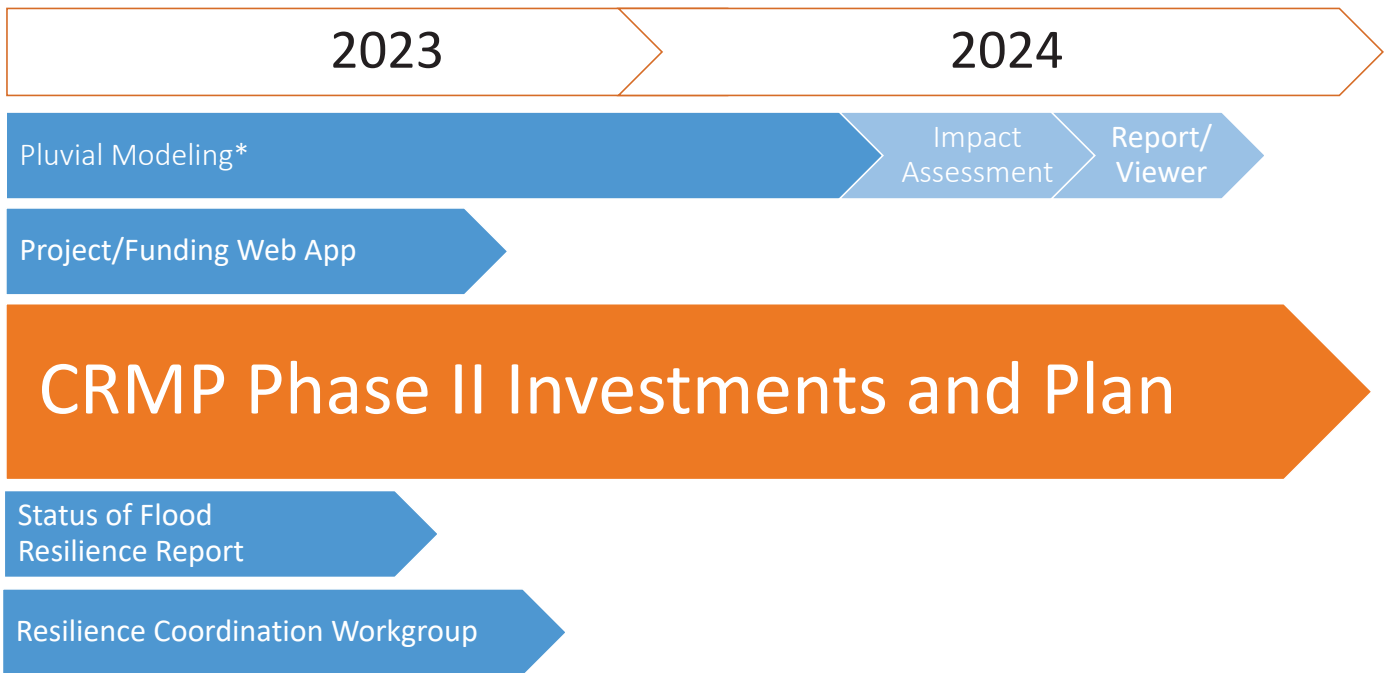Current and Potential(+) Investments for Phase II

- Project Database Web Application

  - + Outreach and Training

- Additional Projects and Updates

  - + State and Regional HMP Flood Projects

  - + DEQ CZM PDC Grant Projects

  - + CFPF Resilience Plan Projects

DCR
Virginia Department of Conservation & Recreation

CRMP Phase II – Community Outreach and Engagement

Current and Potential(+) Investments for Phase II

- + Increase Flood Resilience Education and Awareness

- + Community Centered Public Information

- + Curate Community Lived Experiences and Flooding Challenges

- + Project Development Technical Assistance

DCR
Virginia Department of Conservation & Recreation

CRMP Phase II - Schedule

2023	2024

Pluvial Modeling* — Impact Assessment — Report/ Viewer

Project/Funding Web App

CRMP Phase II Investments and Plan

Status of Flood Resilience Report

Resilience Coordination Workgroup

Coastal Resilience Master Plan Objective

Coastal Resilience Master Planning Framework:

• Virginia needs to...

  • Develop a unified and comprehensive strategy to identify critical assets and areas of concern, and preferred approaches to improve resilience.

  • Decide which areas or projects are most deserving of limited resources, and Virginia must harmonize those projects to ensure that one region's flood control project does not exacerbate flooding in adjacent areas.

  • Create a plan to finance these projects.

Coastal Resilience Master Plan Objective

Coastal Resilience Master Planning Framework:

- The Coastal Resilience Master Plan will....
    - be a detailed plan, divided by region.
    - prioritize projects according to state guidelines and local and regional needs.
    - determine state-administered flood preparedness and pre-disaster mitigation funding.
- Coordination through the Governor's office is necessary to ensure that the Commonwealth is able to increase coastal resilience in a cost-effective way that minimizes duplication of effort and unintended consequences.

CRMP Phase II – The Plan Will Include....

- A Vision for the Future
- Major Flood Hazard Exposure
- Critical Infrastructure Assessment
- Flood Resilience Prioritized Needs
    - Critical Infrastructure
    - Resilience Planning
    - Project Development
    - Project Implementation
- A Plan of Action
    - What will the Commonwealth do to identify and meet the Need (Outreach, Funding, Policy, Guidance, Projects???)
    - What does the Commonwealth recommend/need for/from Others?

Community Outreach
and Engagement Plan Update

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

Community Outreach and Engagement Plan

- Current Status
  - Drafted to serve as a framework and living document that can adapt as the CRMP and VFPMP are developed
  - Plan is undergoing Executive Review
- December 2022
  - Community Outreach and Engagement Plan prepared for 30-day Public Comment
- 2023
  - Final Community Outreach and Engagement Plan published
  - External support to refine and implement the Plan

2022 CRMP TAC Subcommittee Organization

Summary of TAC Feedback

2022 TAC Subcommittees – Mirror Framework Goals

- Project Prioritization

- Funding

- Research, Data, and Innovation

- Outreach and Coordination

- [Public Policy]

2022 TAC Subcommittees

Project Prioritization

Objectives
- Critical built and natural infrastructure inventory
- Develop objective protocols for evaluating and prioritizing identified project needs.
    - State v Regional v Local v Individual Priorities
- Develop objective protocols for evaluating and prioritizing project alternatives.
- Recommend evaluation protocols that balance human, built, and natural infrastructure needs.
- 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 [state?] financing strategy that recommends how [state agencies?] can leverage and align existing resilience revenue streams to maximize impact, and how to create or tap into new revenue or financing sources.
  - Who is the funding strategy for? State, Regions, Localities?
- 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.
  - What are Virginia's specific desired outcomes that will direct the use of state and federal funds to meet these objectives?
- Identify methods to support local revenue needed to build capacity and implement flood resilience projects.

2022 TAC Subcommittees

Research, Data, and Innovation

Objectives

- Recommendations to effectively incorporate of climate change projections in state and local programs
  - For what purpose/desired outcome?
- Track ongoing research related to coastal resilience
- Provide recommendations to state and local programs on best available data and practices.
  - What state and local programs and what do you expect these programs to do with the date and practices?
- Innovation through R&D, public-private partnerships, and collaborative research is needed to invent the novel, applied solutions necessary to enhance community resilience, economies, and culture, live with more water, and prepare tomorrow's workforce.

2022 TAC Subcommittees

Outreach and Coordination

Objectives

- Assist in developing and executing a comprehensive outreach strategy to engage coastal communities that aligns with the goals and objectives of the COEP.
  - Who is to be engaged and for what purpose?
- 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.
  - The roles and responsibilities between Localities and Tribal Nations (especially non-federal) needs to be clarified.

2022 TAC Subcommittees

Next Steps

- TAC Members to serve on at least one subcommittee.

- DCR will send a poll for preference.

- CRO will designate subcommittee chairs and membership.

- CRO will send charge to subcommittees with prioritized objectives.

QUESTIONS

DCR Contact Information

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https://www.dcr.virginia.gov/crmp/

https://www.dcr.virginia.gov/dam-safety-and-floodplains/flood-protection-outreach

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