

# Virginia Coastal Resilience Technical Advisory Committee

## Quarterly TAC Meeting Agenda

Date: Thursday, March 16, 2023

Time: 10:00 AM

Location: William & Mary  
School of Education, Matoaka Woods Room  
301 Monticello Ave, Williamsburg, VA 23185

Virtual Public Access: Register at <https://attendee.gotowebinar.com/register/2784592790431000154>

## Meeting Agenda

- 1) Call to Order, Roll Call, and Introductions
- 2) Adoption of Meeting Minutes from December 01, 2022
- 3) VDOT Resilience Plan Presentation and Discussion
- 4) Reports from DCR
  - a. Virginia Coastal Resilience Master Plan Update
  - b. Community Outreach and Engagement Plan Update
  - c. Resilience Coordination Working Group Update
- 5) TAC Subcommittees Establishment
- 6) Old Business
  - a. TAC Member Discussion
- 7) New Business
  - a. TAC Member Discussion
- 8) Public Comment
- 9) Adjourn

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

# VDOT RESILIENCE PLAN

Coastal Resilience Master Plan Technical Advisory Committee

Chris Berg, Director, Office of Transportation Sustainability

3/16/2023

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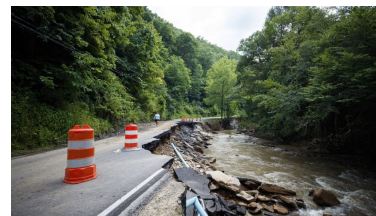
## Changing Environmental Conditions

### Hazards and Threats

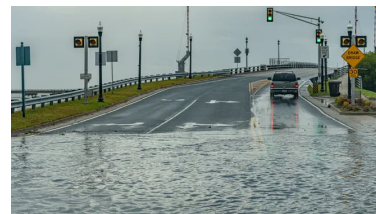
- Temperature
- Sea Level Rise
- Increased Precipitation
- Extreme Weather Events
- Rockfall & Slope Failures

### Impacts

- Asset deterioration and failure
- Operational, maintenance and emergency management challenges
- Need to identify cost-effective solutions
- Shifting migration patterns, habitat, etc.



<https://wtop.com/virginia/2022/07/crews-still-searching-for-17-people-after-virginia-flooding/>



<https://www.delmarvanow.com/story/news/local/maryland/2021/10/29/flooding-high-surf-forecasted-maryland-virginia-eastern-shore/6190861001/>

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## Virginia Planning Efforts

### Commonwealth Planning

- Virginia Coastal Resilience Master Plan
- Virginia Flood Protection Master Plan
- Virginia State Hazard Mitigation Plan
- Resilience Coordination Working Group



### Local Planning

- Fairfax, Norfolk, Virginia Beach
- NVRC, HRPDC, MPPDC, etc.

➤ **VDOT plan needed to inform and align agency, local planning efforts**

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## Need for Transportation Resilience

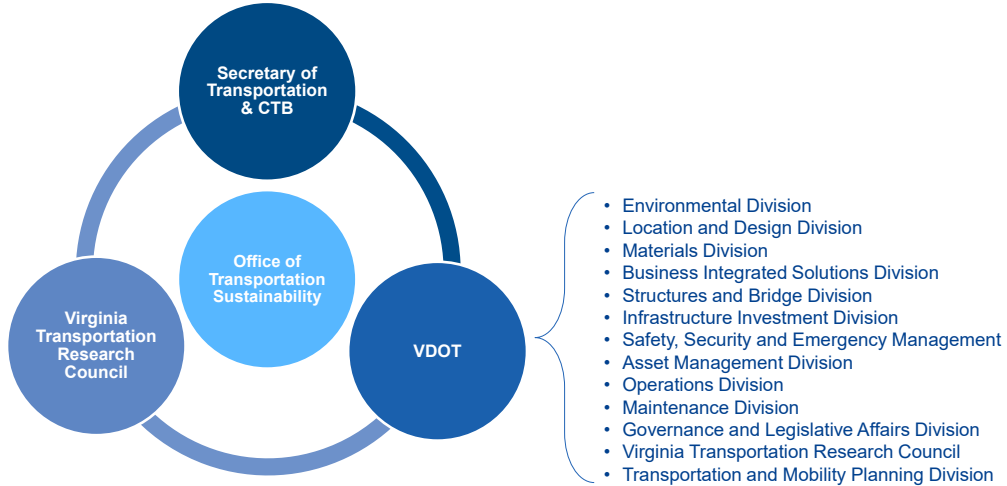
**Resilience** is the capability of a transportation project or strategy to anticipate, prepare for, respond to, or recover from significant multi hazard threats with minimum damage and disruption to the transportation network, while preserving and incorporating natural and built infrastructure that helps to mitigate these threats.



Incorporate resilience into existing business practices

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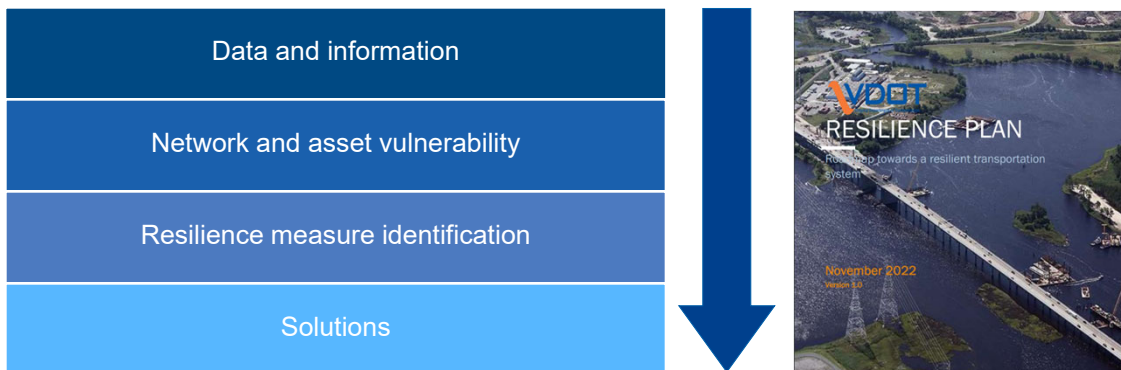
## Organizational Support for Resilience Efforts



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## VDOT Resilience Plan

How do we cost-effectively address resilience?



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# Resilience Plan Objectives

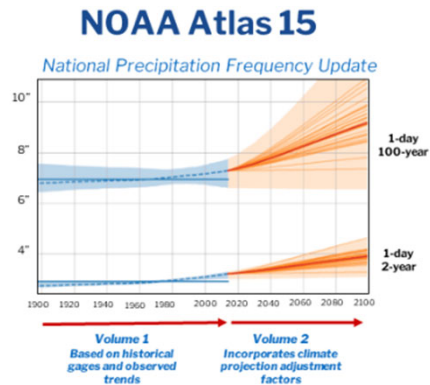
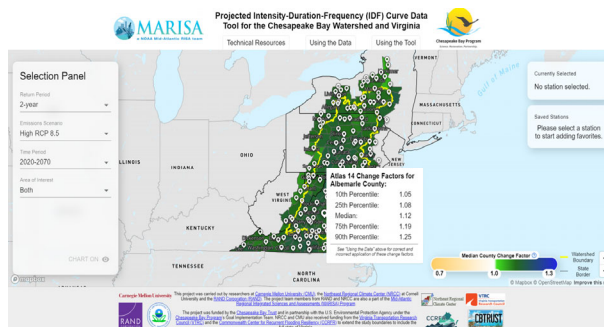
Framework for gathering data, developing tools, and implementing strategies

- |  |   |
|--|---|
| 1. Data Driven Decisions                       | <ul style="list-style-type: none"> <li>• Authoritative Datasets</li> <li>• Data and Research Gaps</li> </ul>  |
| 2. Stakeholder Engagement                      | <ul style="list-style-type: none"> <li>• Coordination with Federal, State, MPO, Local Initiatives</li> </ul>  |
| 3. Identify At-Risk Infrastructure             | <ul style="list-style-type: none"> <li>• Visualization Tool (Exposure, Sensitivity, Criticality = Overall Vulnerability)</li> <li>• Inform focus areas, projects</li> </ul>   |
| 4. Resilience Measures                         | <ul style="list-style-type: none"> <li>• Adaptive Design Criteria (Hydraulics, Materials, Structure and Bridge)</li> <li>• Natural and Nature-Based Solutions</li> <li>• Operational, Maintenance, and Emergency Management Measures</li> <li>• Administrative and Policy Measures</li> </ul> |
| 5. Feasibility and Cost Effectiveness Analyses | <ul style="list-style-type: none"> <li>• Develop Benefit Cost Analysis Tools</li> </ul>   |
| 6. Funding Opportunities                       | <ul style="list-style-type: none"> <li>• PROTECT</li> <li>• Other Funding Opportunities</li> </ul>  |



# Resilience Plan Objectives

- Promote Data Driven Decisions**
  - Authoritative Datasets
  - Identify research and data needs and gaps
    - Resilience Research Committee



# Resilience Plan Objectives

## 2. Engage & Coordinate with Stakeholders

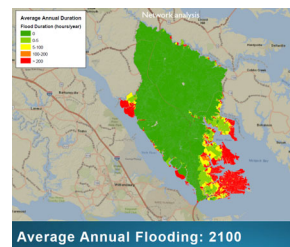
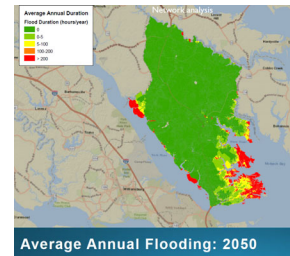
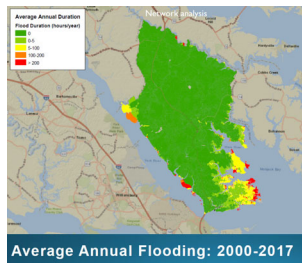
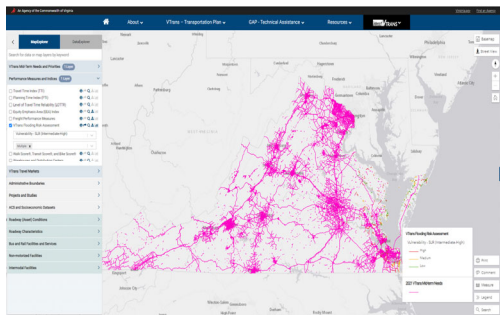
- Department of Conservation and Recreation – VA Coastal Resilience Master Plan Technical Advisory Committee
- Hampton Roads Planning District Commission Working Group
- Northern Virginia Regional Commission Working Group
- Fairfax Infrastructure Advisory Group
- Transportation Research Board Working Group
- State Hazard Mitigation Plan Technical Advisory Committee and Working Group
- Federal Highway Administration
- Other State Agencies
- Metropolitan Planning Organizations and Localities
- Universities
- NGOs and Advocacy Groups
- Public

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# Resilience Plan Objectives

## 3. Identify At-Risk Infrastructure and Prioritize Needs

- Exposure + Sensitivity + Criticality
- Network Analysis



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# Resilience Plan Objectives

## 4. Finalize Resilience Measures

### *I. Adaptive Design Criteria*

Enhance Criteria for Identified At-Risk Infrastructure, incorporating forward looking conditions

- Structure and Bridge
  - Chapter 33: Consideration of Climate Change and Coastal Storms (Feb 2020)
- Hydraulics, VDOT Drainage Manual
- Materials, Manual of Instruction

### *II. Other Physical Enhancement Measures*

- Flood Barriers

### *III. Natural and Nature-Based Solutions*

- FHWA Coastal Natural and Nature Based
- FHWA Riverine Natural and Nature Based

### *IV. Operational, Maintenance, and Emergency Management*

- Early Warning Devices (Sensors)
- Evacuation Routes
- Damage Assessments
- Floodcast (NCHRP)

### *V. Administrative and Policy Measures*

# Resilience Plan Objectives

## 5. Feasibility and Cost Benefit Analyses

- Feasibility Analysis
- Benefit Cost Analysis (BCA)
- Lifecycle Cost Analysis (LCCA)

## 6. Funding Opportunities

- Building Infrastructure Resilient Communities (BRIC) Grants, FEMA
- BIL/IIJA (PROTECT)

## PROTECT Program

### Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation

- Planning Activities, including Resilience Improvement Plan (RIP) development
  - Vulnerability assessments, technical capacity building, evacuation planning
- Resilience Improvements
  - Flood mitigation, drainage improvements, roadway realignment
- Community Resilience
  - Evacuation route improvements
- At Risk Coastal Infrastructure
  - Strengthening, stabilizing, hardening, elevating, and relocating infrastructure

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## Next Steps

- Continue coordination with Federal, State, and local agencies, MPOs
- Continue coordination with counterpart DOTs
- Outreach and engagement with communities, stakeholder groups
- Continue strategy development and implementation
  - Data and research
  - Identification of at risk infrastructure
  - Resilience measures
    - Planning
    - Design
    - Operations and maintenance
    - Emergency management
  - Benefit Cost and Life Cycle Analyses

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## **VDOT Resilience Contacts**

### **Chris Berg**

*Director of Sustainability*

Office: 804-786-0650

[christopher.berg@VDOT.Virginia.gov](mailto:christopher.berg@VDOT.Virginia.gov)

### **Maria Mutuc, PE**

*Resilience Program Manager*

Office: 804-729-6689

[maria.mutuc@VDOT.Virginia.gov](mailto:maria.mutuc@VDOT.Virginia.gov)

# Coastal Resilience TAC

DCR Update 03/16/2023

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# Presentation Outline

- Coastal Resilience Master Plan Update
- Community Outreach and Engagement Plan Update
- Resilience Coordination Working Group Update
- TAC Subcommittees

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# Virginia Coastal Resilience Master Plan Update

03/16/2023

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## 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](#)]

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# 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 Efforts Needed via RFP
  - Community Outreach and Engagement
  - Major Flood Hazard - Riverine
  - Phase II Planning and Plan Development

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# Coastal Resilience Web Explorer

The screenshot shows the 'Projects and Initiatives' page of the Coastal Resilience Web Explorer. At the top, there are navigation tabs: Introduction, Hazards, Impacts, Community Context, **Projects and Initiatives**, and Funding Opportunities. Below the tabs is a descriptive paragraph: 'The collected projects represented here provide an initial sample of the substantial resilience project needs within the Commonwealth. Projects were collected through a survey call issued to localities and PDCs. Future CRMP efforts will seek to extend the coverage of this database while moving to a more comprehensive capture of needs across the Commonwealth.' Below this is a 'Select Area of Interest' section with dropdowns for 'Commonwealth' (set to Virginia) and 'Virginia'. There are also 'Filters' for Category, Hazard Addressed, and Project Class, all currently set to 'All'. An 'Additional Map Layers' section lists various layers like 'Coastal Floodplains', 'Community Resource Impact Areas', etc. A search bar contains the text 'Projects and Initiatives (Features: 517, Selected: 0)'. A list of project names is displayed, including '18th Street Drainage Improvements', '1. Crow's Nest Peninsula and Estuary Conservation', '2019 FMA', '5th Street Improvements', 'Aberdeen Gardens Drainage Improvements', 'Aberdeen Road Disconnect Wet Pond', 'Aberdeen School Neighborhood Park ED Wetland Retrofit', 'Amherst Road Wetlands', 'Annual Coastal Bays seagrass restoration', 'Appomattox River Trail (blueway and greenway)', 'Aquatic Center Parking Lot', and 'Acquisition of LIDAR Data'. On the right, a map of Virginia shows project locations marked with green dots, primarily in the coastal and northern regions.

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## Coastal Resilience Web Explorer

**VIRGINIA COASTAL RESILIENCE WEB EXPLORER** Ver 1.0


Introduction Hazards Impacts Community Context Projects and Initiatives **Funding Opportunities**

The Master Plan expanded and enhanced a funding database established by the Virginia Coastal Zone Management Program. This database is intended to provide a comprehensive resource of applicable programs and mechanisms that would support coastal resilience projects in Virginia. **Last updated September 2021.**

Search by Column:

VA Funding for Projects (Features: 96, Selected: 0)

Name	Administering Office	Funding Source	Funding Type	Purpose
Addressing the Impacts of Multiple Stressors on Shellfish Aquaculture Through Research/Industry Partnerships	National Oceanic and Atmospheric Administration (NOAA) Oceanic and Atmospheric Research	NOAA	Federal	Supports: establishing, continuing, and/or expanding collaboration between researchers and shellfish growers in order to address how acidification and at least one other environmental stressor affects the U.S. shellfish aquaculture industry. Project multiple parameter physical, chemical, or biological observing systems and/or conduct multiple stressor experimental responses of this funding opportunity are to (1) build or strengthen relationships between the shellfish aquaculture industry, aquaculture research community (including university, industry, private sector, tribal, state, and/or federal scientists represent perspectives), (2) develop scientific knowledge on the impact of ocean and coastal acidification in combination with other shellfish aquaculture, and (3) create data products, tools, technologies, management practices, or other deliverables that are applicable to building resilience within the shellfish aquaculture sector.
Building Resilience Against Climate Effects: Implementing and Evaluating Adaptation Strategies that Protect and Promote Human Health	National Center for Environmental Health	CDC	Federal	Supports: the building and enhancement of the resilience of U.S. cities and states to the health impacts of climate change overarching strategies. These strategies include 1) collaboration with stakeholders to create a Climate Impact Compendium; 2) implementation of adaptation actions that address the threats identified in the Compendium; and 3) use and dissemination of the Compendium to improve adaptation actions and enhance understanding of effective climate resilience adaptations in public health and

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## Project/Funding Database Web Application

- Provide online access to [Resilience Project and Initiatives](#) and [Funding Opportunities](#) to develop, revise, and archive entries.
- Participant users approved by project owners can maintain projects and initiatives
- DCR managers and other approved participant users can maintain resilience funding opportunities
- All entries submitted to DCR for approval prior to publishing on Web Explorer
- Monitor and coordinate planned and implemented resilience actions
- Estimated completion early September 2023
  - Mock-up and Design: Complete
  - Developing: In-progress
  - Stakeholder Input Group Testing: June/July
  - Deployment: August/September

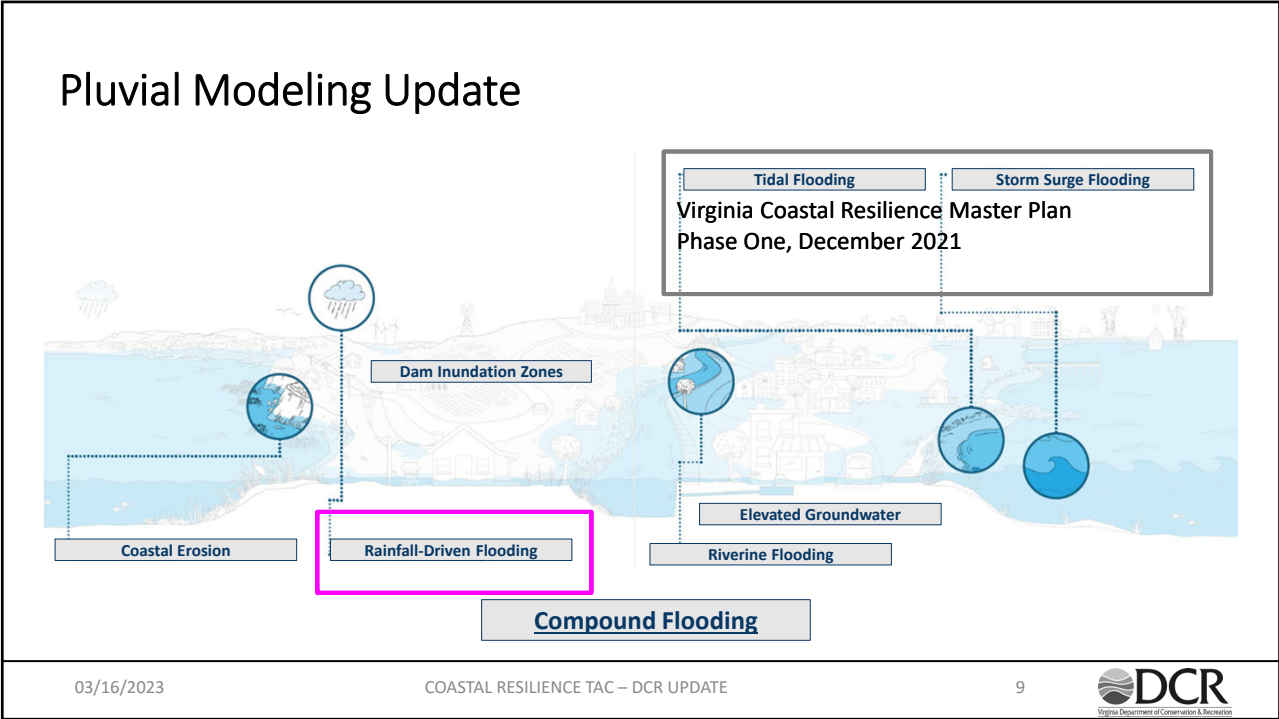
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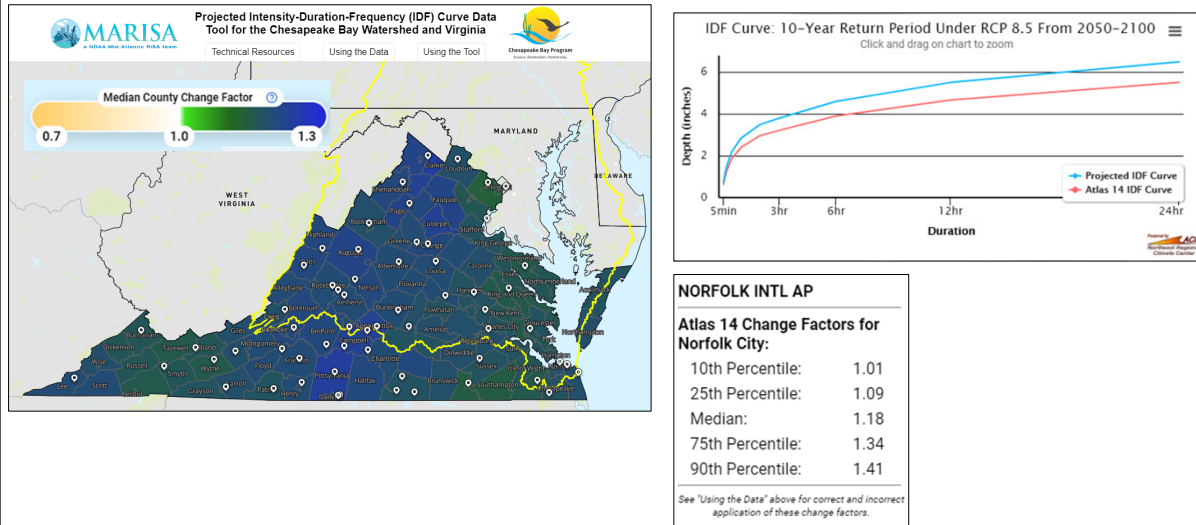
## Master Plan Centralized Survey Results Flood Hazard Priority by Master Planning Region

Hampton Roads (HRPDC)	Rural Coastal (NNPDC, MPPDC, A-NPDC)	Fall Line South (Crater PDC, PlanRVA)	Fall Line North (NVRC, GWRC)
<ol style="list-style-type: none"> <li><b>1. Rainfall-Driven Flooding</b></li> <li>2. Storm Surge Impacts</li> <li>3. Tidal Flooding</li> <li>4. Riverine Flooding</li> <li>5. Coastal Erosion</li> <li>6. Groundwater Impacts</li> </ol>	<ol style="list-style-type: none"> <li><b>1. Rainfall-Driven Flooding</b></li> <li>2. Tidal Flooding</li> <li>3. Coastal Erosion</li> <li>4. Storm Surge Impacts</li> <li>5. Groundwater Impacts</li> <li>6. Riverine Flooding</li> </ol>	<ol style="list-style-type: none"> <li><b>1. Rainfall-Driven Flooding</b></li> <li>2. Riverine Flooding</li> <li>3. Tidal Flooding</li> <li>4. Storm Surge Impacts</li> <li>5. Coastal Erosion</li> <li>6. Groundwater Impacts</li> </ol>	<ol style="list-style-type: none"> <li><b>1. Rainfall-Driven Flooding</b></li> <li>2. Riverine Flooding</li> <li>3. Coastal Erosion</li> <li>3. Tidal Flooding</li> <li>5. Storm Surge Impacts</li> <li>6. Groundwater Impacts</li> </ol>

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Virginia Department of Conservation & Recreation

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## Precipitation increasing in Intensity, Duration, and Frequency



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## Pluvial Flood Modeling Overview

- 8 Coastal PDCs. 57 Localities.
- ~400 HUC-12 basins, 5 to 10 sub-basins per HUC-12.
- Up to 63 simulations per sub-basin
  - Duration
    - 2-hr, 6-hr, 24-hr durations;
  - Return Interval
    - 2-, 5-, 10-, 25-, 50-, 100-, 500-year events; and
  - Three future conditions scenarios (at the Intergovernmental Panel on Climate Change [IPCC] Representative Concentration Pathways [RCP]):
    - Median values for 2020-2070 @ RCP 8.5
    - Median values for 2050-2100 @ RCP 4.5
    - Median values for 2050-2100 @ RCP 8.5



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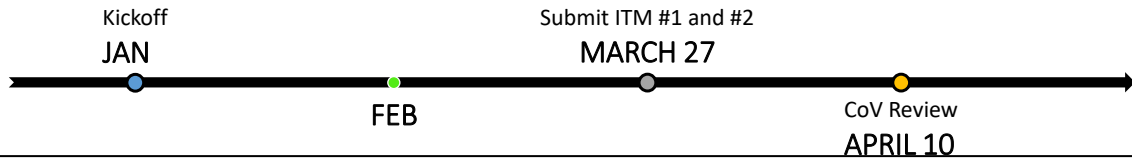
## Data Dev. And Pre-Processing

### SCOPE

- Update topo
- Data model development
- Precipitation, infiltration, and roughness data
- Data automation pipelines

### DELIVERABLES

- Interim Technical Memo (ITM) #1 – Geom. and Parameterization
- ITM #2 – Model Forcing: Data and Methodology



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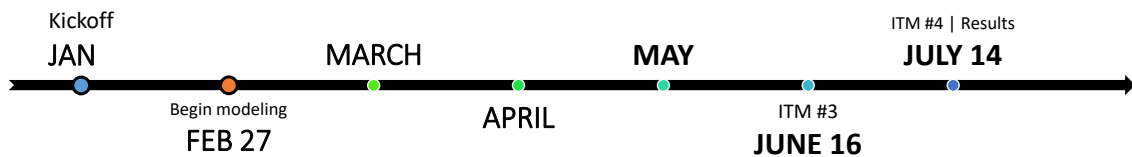
## Pilot Hydraulic Modeling

### SCOPE

- Develop and test model automation pipeline
- Perform pilot runs for 50 pilot basins, chosen from HUC12s
- Perform final adjustments and post-process initial results

### DELIVERABLES

- ITM #3 – Model Dev. Pipeline
- Draft ITM #4 – Pluvial Pilot Findings
- Quality Plan for Pilot
- Pilot Results



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## Independent Technical Review of Pilot Models

### SCOPE

- Team member GKY to provide indep. review of draft models for first 5 basins and first 50 basins.
- **End users guide – how to use the models for resilience planning in their communities**

### DELIVERABLES

- Tech. memo for first 5 basins
  - 2 weeks after receipt of first 5 basins
- Tech. memo for first 50 basins
  - 3 weeks after receipt of first 50 basins
- End users guide
  - Draft by Aug 25
  - Final by Nov 30



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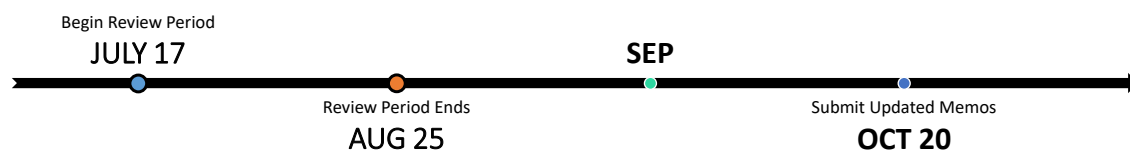
## Pilot Modeling Coordination and Review

### SCOPE

- Coordination on pilot modeling
- **Meetings to discuss findings of pilot with DCR and stakeholders**
- Respond to feedback
- Update ITMs 1-4

### DELIVERABLES

- Update ITMs 1-3 including any revisions following feedback
- Update ITM #4
- Meeting notes for up to 10 meetings



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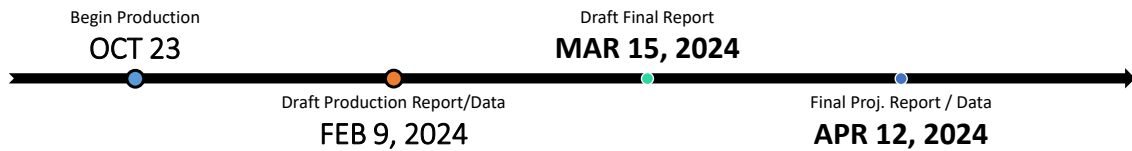
# Study-wide Hydraulic Modeling

## SCOPE

- Create and run production models
- Review (automated) models
- Post-process models and develop hosted map layer with download links
- Reporting and data transfer session

## DELIVERABLES

- Results transmitted using AWS S3 – models, depth grids, inundation polygons
- Hosted map layer
- Reports
- Data Transfer meeting PPT, recording, and notes



# Community Outreach and Engagement Plan (COEP)

## Summary Public Comments



## Community Outreach and Engagement Plan Overview

- Enactment Clause 3 of HB516/SB551 (2022) the 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.
- Jointly prepared by DCR and ODOI
- Designed to be a framework for a whole community approach
- Describes overall goals and approach
- Plan development, detailed actions, and deliverables will be provided by contractors selected via a DCR RFP process.

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## Public Comment Overview

- Public Comment Period
  - 12/30/22 – 1/31/2023
- Solicited public comment via Virginia Regulatory Town Hall, direct email, and existing virtual outreach meetings
- Virginia Regulatory Town Hall
  - 7 Comments
- [Flood.Resilience@dcr.virginia.gov](mailto:Flood.Resilience@dcr.virginia.gov) Email
  - 6 Emails with attachments (letters and COEP markup)
- Individuals, State Agency, Non-Profit/Governmental Organizations, Regional Planning District Commissions

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## COEP Comments Outline

- COEP Section Comments
  - What is the Community Outreach and Engagement Plan?
  - What's Been Done So Far?
  - What Do We Want to Accomplish through the COEP?
  - What Actions Will We Take?
- Additional COEP Comments
  - How will outreach and engagement will be incorporated into the Plans?
  - How will DCR measure success and track progress?
  - What level of commitment are you making?

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## What is the Community Outreach and Engagement Plan?

- Who is the intended audience for the COEP?
- Engagement is missing.
- There needs to be a clear scope of work and schedule for the RFP(s) and the Commonwealth should seek input and feedback on the scope and schedule before the RFP is finalized.

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## What's Been Done So Far?

- Acknowledge past and current outreach and engagement efforts that local government have and are conducting.
- Acknowledge existing public participation opportunities.

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## What Do We Want to Accomplish through the COEP?

- It is important to distinguish between overall goals and objectives that support the goal(s).
- The goal should be to implement the direction provided in the law [HB516/SB551].
- The plan lacks critical specifics and supporting information to demonstrate how the objectives stated in the plan are to be achieved and how they support the overall goals.

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## What Actions Will We Take?

- Avoid **outreach fatigue** in communities that are repeatedly asked to provide similar information through increased communication, coordination, and collaboration with the Whole Community.
- Be explicit on the roles and expectations of the Whole Community.
- Two-way knowledge sharing across the Whole Community.
- Institutional knowledge and contacts increase as the area decreases.
- Partner with existing networks and existing efforts to provide mutual benefits.

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## What Actions Will We Take?

- Who decides who is already well served and who is not?
- How will the Commonwealth reach beyond the individuals and organizations that are generally represented through various types of stakeholder committees?
- Be prepared to dedicate more resources and potentially develop alternative strategies to reach and engage these communities.

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## What Actions Will We Take?

- Be prepared to dedicate considerable time and resources upfront in the planning process to identify existing community meeting spaces.
- Be prepared to conduct a variety of activities at multiple times and locations within a community that consider barriers to participation.
- Be prepared to build awareness and a base level of knowledge.
- Be prepared to engage indirectly and focus on shared values.
- Compensate community members for their time to participate.

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## How will Outreach and Engagement will be Incorporated into the Plans?

- Outline how community feedback will be integrated into the Plans.
- Explain how information collected will be disseminated back to community members for their own planning purposes.
- Be explicit about allowing local knowledge and expertise to shape not just the plans, but the objectives and the processes.
- How will the COEP be updated as a living-document?

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## How will DCR Measure Success and Track Progress?

- The way that the plan reads right now, it seems that success is measured by process.
- Provide transparent reports on the engagement process to state and local stakeholders as the COEP is updated.
- Consider creating a task force that monitors the plans goals and creates regularly scheduled intervals of feedback from the "whole community" an ongoing basis.
- Consider creating regional citizen and stakeholder committees to host recurring community meetings to collect feedback on the process.

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## What level of Commitment are you Making?

- Community work is HARD and you must be in it for the long haul or you get surface-level input.
- Maintain on-going relationships with the community-based organizations and groups.
- Invest in in-house outreach and engagement teams.
- Any idea how many communities you would work with?

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# Resilience Coordination Working Group (RCWG) Update

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## RCWG Charge

- This Working Group is being established by the Chief Resilience Officer in furtherance of Governor Youngkin's goal of addressing challenges related to flooding and resilience, and in the spirit of engaging collaboratively with the General Assembly on this important issue. The Working Group will have the following purposes:
  - To consider and assess strategies and policies for the Commonwealth to improve intergovernmental and interagency coordination; and
  - To maximize the procurement of federal and private funding opportunities in planning for and implementing flood resilience throughout the Commonwealth.
- The Working Group will focus on improving the flood resilience of both human and natural systems and infrastructures.
- Working Group recommendations will seek to prioritize strategies to protect and enhance the Commonwealth's water quality objectives, as well as natural systems.
- The Chief Resilience Officer, in coordination with the Department of Conservation and Recreation, will report the results of the examination conducted by the Working Group, along with recommendations as may be appropriate, to the Governor, the Chairmen of the House Committee on Agriculture, Chesapeake and Natural Resources and the Senate Committee on Agriculture, Conservation and Natural Resources, and the Virginia Delegation of the Chesapeake Bay Commission no later than November 1, 2023.

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## RCWG Organization Representation

- Central Shenandoah PDC (CSPDC)
- Chesapeake Bay Commission (CBC)
- Chesapeake Bay Foundation (CBF)
- City of Alexandria
- Clark Nexsen
- Cumberland Plateau PDC (CPPDC)
- Environmental Defense Foundation (EDF)
- Hampton Roads PDC (HRPDC)
- Home Builders Association of Virginia (HBAV)
- Middle Peninsula PDC (MPPDC)
- Mount Rogers PDC (MRPDC)
- Old Dominion University - ICAR/CCRFR (ODU)
- Port of Virginia
- Secretary of Natural and Historic Resources (SNHR)
- Secretary of Veterans and Defense Affairs (VADA)
- Soil and Water Conservation Board (SWCB)
- The Nature Conservancy (TNC)
- University of Virginia - IEN (UVA)
- Virginia Marine Resources Commission (VMRC)
- Virginia Agribusiness Council (VAC)
- Virginia Association of Soil and Water Districts (VASWCD)
- Virginia Chamber of Commerce (VACHamber)
- Virginia Department of Conservation and Recreation (DCR)
- Virginia Department of Emergency Management (VDEM)
- Virginia Department of Environmental Quality (DEQ)
- Virginia Department of Housing and Community Development (DHCD)
- Virginia Department of the Treasury (Treasury)
- Virginia Department of Transportation (VDOT)
- Virginia Department of Energy (Energy)
- Virginia Department of Wildlife Resources (DWR)
- Virginia Economic Development Partnership (VEDP)
- Virginia Farm Bureau (VFB)
- Virginia Institute of Marine Science (VIMS)
- Virginia Manufacturer's Association (VMA)
- Virginia PACE Authority (VPA)
- Virginia Resources Authority (VRA)
- Virginia Tech - CCS (VT)
- William and Mary - VCPC (W&M)
- Sec. of Education
- Deputy Secretary of Transportation
- Deputy Secretary of Finance
- Deputy Secretary of Transportation
- Virginia Association of Planning District Commissions (VAPDC)
- Virginia Association of Counties (VACO)

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## RCWG Meeting Schedule Outline

Meeting Month	Meeting Topic	Working Group Member Post- Meeting Responsibilities
January	<ul style="list-style-type: none"> <li>• Work Group introduction</li> <li>• VA resiliency planning environmental scan (VES)</li> </ul>	<ul style="list-style-type: none"> <li>• Submit organizations' role information to PMG</li> </ul>
February	<ul style="list-style-type: none"> <li>• Review VA agency roles</li> <li>• Discuss subcommittees</li> </ul>	<ul style="list-style-type: none"> <li>• Submit subcommittee preferences</li> </ul>
March	<ul style="list-style-type: none"> <li>• Preliminary peer state resiliency planning analysis (PSA) introduction</li> </ul>	<ul style="list-style-type: none"> <li>• Attend first virtual subcommittee meeting</li> <li>• Review VES draft</li> </ul>
April	<ul style="list-style-type: none"> <li>• Subcommittees report out</li> </ul>	<ul style="list-style-type: none"> <li>• Attend subcommittee meeting</li> <li>• Review PSA draft</li> </ul>
May	<ul style="list-style-type: none"> <li>• Review PSA</li> <li>• Discuss strategies and policies to improve resilience coordination</li> <li>• Discuss funding opportunities to plan and implement flood resilience</li> <li>• Subcommittees report out</li> </ul>	<ul style="list-style-type: none"> <li>• Attend subcommittee meeting</li> <li>• Review draft strategies, policies, and funding opportunities</li> </ul>
June	<ul style="list-style-type: none"> <li>• Discuss recommended strategies, policies, and funding opportunities</li> <li>• Subcommittees report out</li> </ul>	<ul style="list-style-type: none"> <li>• Attend final subcommittee meeting</li> <li>• Review draft recommendations</li> </ul>
July	<ul style="list-style-type: none"> <li>• Draft recommendations</li> <li>• Final report out from subcommittees</li> </ul>	<ul style="list-style-type: none"> <li>• Review draft final report and recommendations</li> </ul>
August	<ul style="list-style-type: none"> <li>• Final report and recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Review final report and recommendations</li> </ul>
September	<ul style="list-style-type: none"> <li>• Final recommendations voting</li> </ul>	

Report submitted to Governor and General Assembly no later than November 1, 2023

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# 2022 CRMP TAC Subcommittee Organization

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## 2022 TAC Subcommittees – Mirror Framework Goals

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

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## Subcommittee Roster

	Subcommittee #1 Project Prioritization	Subcommittee #2 Funding	Subcommittee #3 Research, Data, and Innovation [SC3-RDI]	Subcommittee #4 Outreach and Coordination
	[SC1-PP]	[SC2-FUN]		[SC4-O&C]
Membership	A-NPDC Crater PDC HRPDC NNPDC PlanRVA VDOT VMRC Virginia Port Authority Wetlands Watch Office of Data Governance and Analytics	HRPDC MPPDC DHCD Sea Grant VDEM VDOT VMRC VRA W&M VCPC VA Chamber of Commerce	HRPDC NVRC DEQ Sea Grant VMRC VTRC ODU-ICAR UVA-ERI VIMS VT Wetlands Watch	GWRC Upper Mattaponi DHCD ODOI VDOT USACE Virginia Farm Bureau The Nature Conservancy Wetlands Watch Virginia Manufacturers Association
Advisors				Sec of Education Navy UVA-IEN
Recommended Additional Advisors	VIMS DCR-SEAS McGuireWoods	Reinsurance Industry Representative DoD Chesapeake Bay Program (CBP)	George Mason University, Virginia Climate Center (VCC)	Virginia's Secretary of Veterans and Defense Affairs DoD Chesapeake Bay Program (CBP)

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## 2022 TAC Subcommittees

### Next Steps

- CRO will designate subcommittee chairs and membership.
- CRO will send charge to subcommittees with prioritized objectives.

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## QUESTIONS

DCR Contact Information

Resilience Planning

[matt.dalon@dcr.Virginia.gov](mailto:matt.dalon@dcr.Virginia.gov)

[Flood.Resilience@dcr.Virginia.gov](mailto:Flood.Resilience@dcr.Virginia.gov)

[dcr.virginia.gov/crmp/](https://dcr.virginia.gov/crmp/)

[dcr.virginia.gov/dam-safety-and-floodplains/dam-safety-and-floodplains-calendar](https://dcr.virginia.gov/dam-safety-and-floodplains/dam-safety-and-floodplains-calendar)

[dcr.virginia.gov/dam-safety-and-floodplains/flood-protection-outreach](https://dcr.virginia.gov/dam-safety-and-floodplains/flood-protection-outreach)