

Contents

Research, Data, and Innovation Subcommittee Recommendations	2
Project Prioritization Subcommittee Recommendations	3
Funding Subcommittee Recommendations.....	4
Outreach and Coordination Subcommittee Recommendations	5
List of Referenced Entities	6

Note:

The recommendations contained herein represent the final subcommittee recommendations as voted on at the Q4 Subcommittee meetings, with suggested revisions in track changes by the DCR Office of Resilience Planning.

Following the Q4 subcommittee meetings, the DCR Office of Resilience Planning reviewed the entity terms used in the recommendations for consistency across recommendations. The track changes included in this document represent potential language changes for the Technical Advisory Committee’s consideration. The purpose of the suggested revisions is to provide consistency across the recommendations as well as with the key terms used in the Coastal Resilience Master Plan, Phase II.

A complete list of referenced entities and the recommendations in which they appear is included at the end of this document.

Research, Data, and Innovation Subcommittee Recommendations

R-a: The Chief Resilience Officer should coordinate with the Commonwealth’s research universities and the Interagency Resilience Management Team to regularly inventory existing data and to collect and share quantitative and qualitative flood resilience data, data production efforts, and assessments of data usage in decision-making applications across the Commonwealth.

Purpose: Minimize duplication of efforts and effectively mobilize our collective capacity to support evidence-based flood resilience decision-making with best available data.

R-b: The DCR Office of Resilience Planning and other state agencies, in collaboration with [the Commonwealth’s](#) research universities and local governments, should identify priority data needs to support ongoing planning and decision making and recommend implementation strategies for fulfilling those needs.

Purpose: Maintain the best available data to inform decisions in a changing environment.

R-c: The Flood Resilience Advisory Committee should actively support [the DCR Office of Resilience Planning](#) in establishing clear and measurable resilience goals aimed at enhancing the Commonwealth’s capacity to withstand and recover from flood events. DCR should solicit the involvement of the Commonwealth’s research universities and other key stakeholders to contribute their expertise in developing relevant indicators and metrics to monitor progress toward these resilience goals.

Purpose: Define, measure, and monitor the efficacy of resilience projects to support adaptive management. This should be based on Virginia-centric data and address ecological, infrastructure, social, economic, cultural, environmental justice, and other emerging dimensions of resilience performance.

R-d: DCR’s Office of Resilience Planning should engage with key stakeholders to understand local obstacles and gaps in state-level programs and develop a statewide strategy that leverages co-production of innovative state-level solutions to meet local needs.

Purpose: Identify appropriate state-scale collective actions to support local resilience challenges through community engagement and innovation.

R-e: The Commonwealth’s research universities should evaluate the performance and co-benefits of existing and emerging nature-based and hybrid solutions for water quantity and water quality protections through collaborations with public and private stakeholders. These efforts should track progress, adapt approaches, and identify funding sources for continued collaborative efforts.

Purpose: Understand the flood risk reduction and other benefits of existing and emerging nature-based and hybrid solutions through collaborative research efforts.

Project Prioritization Subcommittee Recommendations

P-a: The DCR Office of Resilience Planning should incorporate best available science into future iterations of the Coastal Resilience Master Plan for all components of flood risk to support appropriate project prioritization.

Purpose: Enhance informed decision-making for flood resilience.

P-b: The Commonwealth should establish sufficient funding to implement the Coastal Resilience Master Plan and a dedicated, sustainable source for this funding.

Purpose: Improve buy-in for the Coastal Resilience Master Plan.

P-c: The Chief Resilience Officer should request that the Interagency Resilience Management Team should coordinate state agencies to develop, maintain, and enhance appropriate datasets needed to assess flood impacts. The Chief Resilience Officer should invite broad participation from key stakeholders in coordination efforts.

Purpose: Minimize duplication of efforts, streamline communications, and effectively mobilize our collective capacity.

P-d: State agencies should establish programs to engage with and support local governments and planning district commissions, with an emphasis on communities with high flood risk and without flood resilience projects or initiatives. Involved agencies may include DCR, VDEM, and DHCD and where appropriate, state agencies should involve regional institutions of higher education the Commonwealth's research universities in engagement efforts.

Purpose: Understand and address the factors preventing flood resilience action by local governments.

P-e: The DCR Office of Resilience Planning should work with the Flood Resilience Advisory Committee to establish a coordinated framework to operationalize the Coastal Resilience Master Plan at local, regional, and state scales. The framework should integrate data and needs assessments with Coastal Resilience Master Plan principles to develop success metrics and set clear short-, mid-, and long-term goals, to be measured on regular, near-term timespans.

Purpose: Establish a structure to connect the state's coastal flood resilience findings to informed and coordinated action that minimizes adverse impacts and maximizes long-term benefits.

Funding Subcommittee Recommendations

F-a: The Chief Resilience Officer should request that the Interagency Resilience Management Team provide timely financial tools and reports to local governments, [planning district commissions](#), state legislators, and other official entities. These tools and reports should clearly demonstrate the immediate and mid-term costs of inactions to address flood resilience and inform appropriations.

Purpose: Explain the flood consequences of doing nothing at the local, regional, and state levels.

F-b: The Commonwealth's economic development enterprise, public and private, should ensure that businesses, government officials, citizens, and other [key](#) stakeholders are aware of the economic benefits of developing and implementing Virginia-based flood resilience products and services and exporting them to an emerging global market.

Purpose: Ensure stakeholders understand the positive financial potential of investing in resilience solutions.

F-c: The Chief Resilience Officer should request that the Interagency Resilience Management Team provide information to local governments, [planning district commissions](#), state legislators, and other official entities about existing, available, and emerging sources of funding and financial strategies that can support local, regional, and state-wide flood resilience initiatives.

Purpose: Establish an understanding of the financial resources to develop a financial strategy for implementation.

F-d: The Chief Resilience Officer should request that the Interagency Resilience Management Team identify the challenges in the flood-related grant and loan processes specific to private projects and public projects, then recommend opportunities to improve implementation.

Purpose: Understand the financial needs, limitations, and challenges to implementing resilience on public and private property. Example challenges may include administrative, legal, cash flow, reimbursement, proof of expenditure, and others.

F-e: The Chief Resilience Officer should request that the Interagency Resilience Management Team report on the effectiveness of state funding and financing programs to address short-term and long-term flood-related challenges for local governments and the Commonwealth and consider additional financial mechanisms as appropriate.

Purpose: Utilize adaptive management for state-directed funding programs to address the immediate and long-term challenges of flooding.

Outreach and Coordination Subcommittee Recommendations

O-a: The DCR Office of Resilience Planning should develop and maintain a comprehensive list of available funding resources which can be leveraged to sustainably support uptake and implementation of the Coastal Resilience Master Plan.

Purpose: Assist in addressing budgetary constraints which limit plan uptake.

O-b: The Chief Resilience Officer should coordinate with DCR to provide resources and supporting information on the necessity of increased flood resilience funding **by** utilizing project prioritization and evidence of project readiness.

Purpose: Provide support through information sharing to minimize budgetary constraints which limit plan uptake.

O-c: The DCR Office of Resilience Planning should collaborate with potential end-users of the Coastal Resilience Master Plan, such as local governments, by improving usability. This may include providing accessible and straightforward available virtual tools and customized technical support to develop locally specific project prioritization using the plan.

Purpose: Increase flood resilience action and encourage informed decision-making through use of existing plan data and resources.

O-d: The DCR Office of Resilience Planning should develop a strategy to increase use of the Coastal Resilience Master Plan by **plan-its** end-users, including local governments. The strategy should seek to identify and bridge capacity constraints within DCR and for end-users that prevent plan uptake. The strategy should also clearly define roles for state agencies to support end-users.

Purpose: Establish a coordinated, actionable strategy to ensure the Coastal Resilience Master Plan is used.

O-e: The DCR Office of Resilience Planning should collaborate with key stakeholders and local governments to identify the populations and communities at greatest flood risk and offer clear, consistent messaging that can be tailored to a community.

Purpose: Improve outreach to populations at greatest risk.

List of Referenced Entities

Referenced Entity	Role	Recommendation(s) #	Code Reference/ Definition/Listed Organization
Chief Resilience Officer	Responsible	P-c, O-b, F-a, F-c, F-d, F-e, R-a	§ 2.2-220.5
State agencies	Responsible	P-d	DCR, VDEM, DHCD
DCR Office of Resilience Planning	Responsible	P-a, P-e, O-a, O-c, O-d, O-e, R-b, R-d	
Flood Resilience Advisory Committee	Responsible/ Supporting	R-c; P-e	The Flood Resilience Advisory Committee (§10.1-659) is a public body composed of state agency and regional government representatives, and it advises and assists the implementation of flood resilience programs in the Commonwealth.
Interagency Resilience Management Team	Supporting/ Responsible	P-c, F-c, F-d, F-e, F-a	The Interagency Resilience Management Team (§ 2.2-220.5), composed of state agency representatives, supports statewide resilience efforts, including resilience planning and funding coordination.
Local governments	Beneficiary/ Supporting	O-c, O-d, O-e, F-a, F-c, F-e, R-b, P-d	Local governments in Virginia include counties, cities, and towns as defined in Article VII of the Virginia Constitution. Local governments, for the purposes of the Coastal Resilience Master Plan and these recommendations, do not include regional governments which include, but not limited to, planning district commissions and regional commissions.
Planning district commissions	Beneficiary/ Supporting	P-d, F-c , F-a	
Commonwealth	Responsible	P-b	
State legislators	Beneficiary	F-a, F-c	
Government officials	Beneficiary	F-b	
Other official entities	Beneficiary	F-a, F-c	

Referenced Entity	Role	Recommendation(s) #	Code Reference/ Definition/Listed Organization
Research universities in the Commonwealth Commonwealth research universities	Responsible	R-e	
Regional institutions of higher education Commonwealth research universities	Supporting	P-d	
Commonwealth's research universities	Supporting	R-c, R-a	
Research universities Commonwealth research universities	Supporting	R-b	
Plan-its end-users	Beneficiary	O-d	
Potential end-users	Supporting	O-c	
Key stakeholders	Supporting/ Beneficiary	O-e, P-c, R-c, R-d	
Other stakeholders	Beneficiary	F-b	
Public and private stakeholders	Supporting	R-e	
Businesses	Beneficiary	F-b	
Commonwealth economic development enterprise	Responsible	F-b	
Citizens	Beneficiary	F-b	