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