

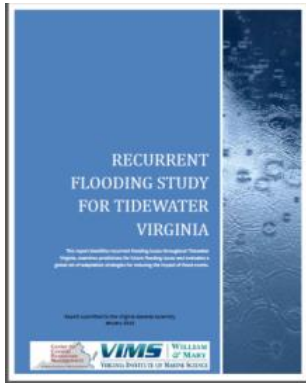
Secure Commonwealth Panel



SCP Recurrent Flooding Sub-Panel

Co-Chair Jim Redick

December 5, 2014

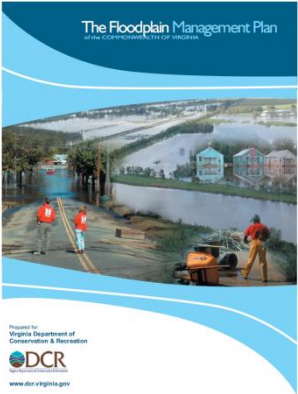


**RECOMMENDATIONS TO THE SECURE COMMONWEALTH PANEL
 ON THE ISSUE OF SEA LEVEL RISE AND RECURRENT FLOODING
 IN COASTAL VIRGINIA**

**SUBMITTED TO THE HONORABLE BRIAN MORAN
 SECRETARY, PUBLIC SAFETY AND HOMELAND SECURITY
 CHAIR, SECURE COMMONWEALTH PANEL**

BY THE RECURRENT FLOODING SUB-PANEL
 CO-CHAIR SENATOR JOHN WATKINS
 CO-CHAIR MR. JIM REDICK, MPA, CEM

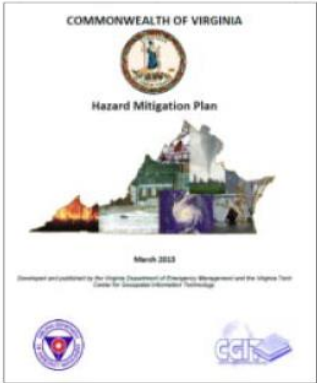
SEPTEMBER 5, 2014



**GOVERNOR'S COMMISSION ON
 CLIMATE CHANGE**

Final Report: A Climate Change Action Plan

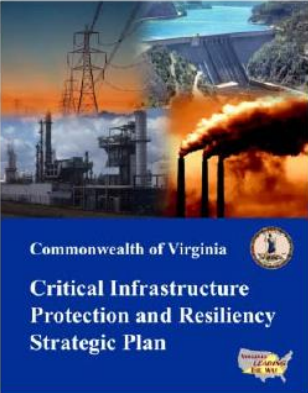
December 15, 2008
 The Honorable L. Preston Bryant, Jr.
 Secretary of Natural Resources
 Chair, Governor's Commission on Climate Change



JLARC JOURNAL OF LEGISLATION AND RESEARCH
 JOURNAL OF THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA

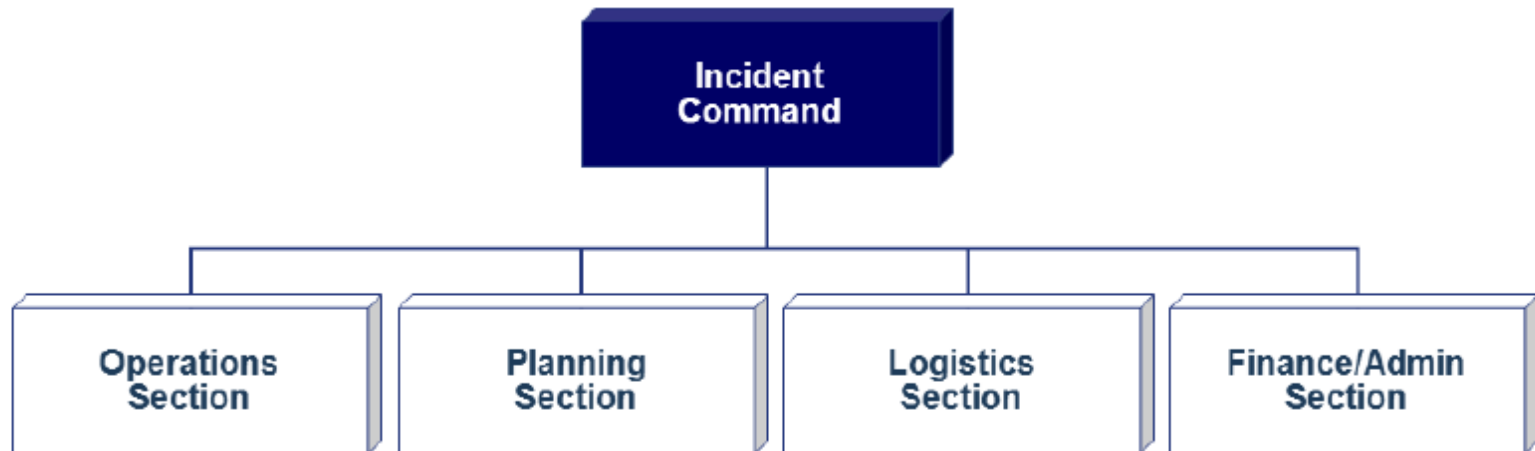
**Review of Disaster Preparedness
 Planning in Virginia**

October 2013

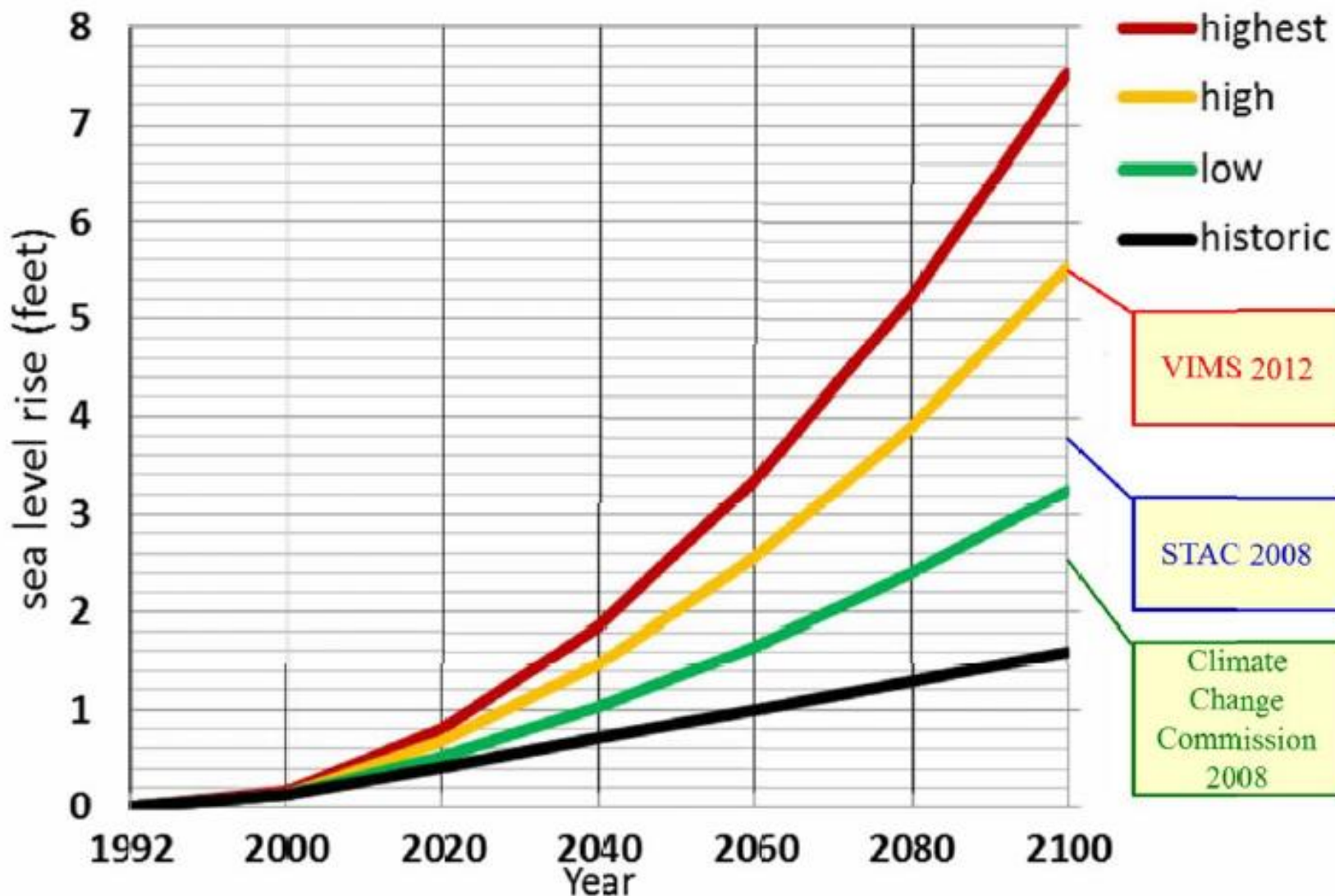


Incident Command System Approach

- Establishing a “Resilience Coordinator”
 - Full Time focus
 - Positioned in State-Level Office
- Establishing a 4-Year Action Plan Cycle
 - Utilizing the Floodplain Management Plan of the Commonwealth of Virginia



SE Virginia sea level rise scenarios





WARNING: Accepting 1.5' for planning is simply the first step to move toward action. It should be noted, however, the concept of planning for a certain SLR trajectory/level gives the false impression that there is a rational basis for deciding on what is a safe level. The next step is to take a scenario-based and probabilistic approach and using the full spectrum of what might happen in terms of SLR to assess the risk in any given location is a more rational approach to decision-making. It is more complex – much like the issue being addressed - but it can be done.



CAUTION: This 1.5' of Sea Level Rise is inundation only; it is important to remember the increased inundation caused by Sea Level Rise is not the only concern. Along with increased depth, duration and frequency of flooding, the threat includes total anticipated water level from storm surge, tidal activity, waves, freshwater input / precipitation and shoreline erosion. *Note: VIMS applied a 3' storm surge in their Recurrent Flood report (VIMS, p. 8).* Put differently, if using the 1933 Ash Wednesday Storm as the flooding storm of record, add 1 meter (3') to see how much more destructive the storm would have been today, and then in the near future. Additionally, planning and mitigation should be done with the *expectation* water will continue to rise in the future.



CAUTION: Lifespan of a project must be considered! Planning, for example, for a new power plant, a new land fill, other critical infrastructure, new residential areas with lifelines of more than a century, a very different approach is needed than accepting just 1.5' of SLR.

Recommendations for the SCP Moving Forward

Continue the SCP

Recurrent Flooding Sub-Panel

- Keep the momentum and partnerships
 - Leverage Silver Jackets
- Identify Resilience Coordinator as recommended to lead the charge.
 - Leverage existing state-level position?
 - Mitigation Funds for Position? Other?
- Update the Floodplain Management Plan of the Commonwealth of Virginia = “Flooding Resilience Action Plan”
 - Assist with the development of project priorities and measures.
 - Pair potential funding with various projects
 - Synchronize Messaging for Individuals and Businesses
- Report to the SCP on the progress based on the goals and measures.

Identify Training and Awareness Opportunities Among Various Audiences

- Leverage USACE Silver Jackets website
 - One centralized Source for Information
- Establish a common and comprehensive understanding of the threat among the following:
 - American Planning Association, Virginia Chapter
 - American Public Works Association, Mid-Atlantic Chapter
 - Virginia 1st (Banking Sector focused on disaster planning)
 - Virginia Bankers Association
 - Virginia Association of Realtors
 - Virginia Association of Zoning Officials
 - Virginia Floodplain Management Association
 - Virginia Housing Commission
 - Virginia Property Insurance Association
 - Mortgage Bankers Association / Lenders
 - Appraisers
 - Insurance Sector
 - Developers

Continuing Education Credits? Professional Development?

Revive Critical Infrastructure / Key Resources Sub-Panel

- Update the “Virginia Plan” to reflect strategies to protect against environmental issues
- Use as a means to bring private sector to the table for voluntary / unified all-hazards planning standards and relationship building
- Leverage DHS Protective Security Advisor and VDEM’s Private Sector Liaison.

Support On-Going Initiatives

(connecting the dots)

- General Assembly Joint Commission
- Governor's Climate Change Commission
- Old Dominion University's Pilot Project
- William and Mary Virginia Coastal Policy Clinic
December 5 Conference



Who is doing what in Coastal Virginia?
A Guide to Current Adaptation Efforts to Sea-Level Rise and Flooding

ACADEMIA

Georgetown University Law's Georgetown Climate Center seeks to advance effective climate policies in the United States. The Center completed a Virginia Case Study *Steering the Tide: How Local Governments Can Manage Rising Flood Risks* which analyzes the authority of Virginia local governments to use existing land use regulations to adapt to sea level rise impacts. The Center is assisting Virginia localities connect with climate scientists to develop strategies for effectively communicating about climate change vulnerabilities and building more resilient communities. The Center will also be releasing, in September 2014, an online tool that will allow users to explore Virginia's progress in implementing its Climate Change Action Plan and local and regional activities to prepare for climate change.

<http://www.georgetownclimate.org/virginia-case-study-steering-the-tide-how-local-governments-can-manage-rising-flood-risks/>
Jessica Grams
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Old Dominion University's Mitigation and Adaptation Research Institute is developing several activities related to mitigation of climate change impacts and adaptation to climate change and sea level rise including new courses, certificates and, eventually, new degrees. ODU also has a Climate Change and Sea Level Rise Initiative that facilitates research, education and regional collaboration on a range of issues including the Hampton Roads Sea Level Rise/Flooding Adaptation Forum.

<http://www.odu.edu/>
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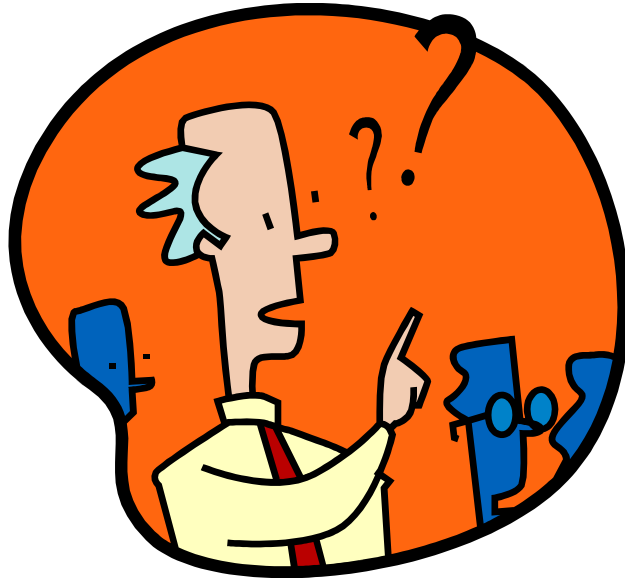
In concert with the National Security Council (and others), ODU has launched the pilot "whole of government" project. The approach aims to better organize federal, state and local government, as well as partners in the private sector and academia to combat impacts of sea level rise and climate change.
Ray Tull, ODU Navy NCOA Liaison
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Bottom Line...

VIRGINIA
ACCOMPLISHMENTS
SINCE THE 2008
CLIMATE ACTION PLAN
RELEASE

December 2014

Questions?



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