



**Increased Flooding Risk Due To Sea Level Rise in Hampton Roads
Concerns, Best Practices and Plans for Adaptation: A Forum**
A Knowledge Management Network to Spur

Innovation and Adoption of Adaptation Best Practices

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The Hampton Roads Adaptation Forum is a regional dialogue among municipalities committed to adopting effective adaptation designs and plans, tailored to meet the needs of our communities in the face of rising sea levels due to climate change. The Forum will be composed of academic institutions and local, regional, state, and Federal agency officials with authority and responsibility for critical infrastructure and facilities in Hampton Roads (e.g., engineers, planners, facility managers, administrators, etc.). We seek to build a professional network that shares information and adaptation lessons learned through communication and information management.

The Forum will enable the most effective and efficient local government adaptation activities by:

- Identifying community-specific **best practices** in adaptation strategies, technologies, and specifications, and promoting broad adoption for regional compatibility.
- Facilitating consistency in **data management** and sharing to ensure common scientific understanding and foundation for local and regional response.
- Establishing targeted, specific adaptation **action plans** for the priority sub-areas identified in current sea level rise, inundation and flooding assessments.
- Facilitating communication and enabling coordination across these priority sub-areas to promote **nested sub-systems** into the broader local city, metropolitan area, and Hampton Roads regional adaptation planning and response.
- Conducting pro-active **Federal liaison** functions to provide a venue for local-state-Federal dialogue that promotes a comprehensive system-wide response.
- Monitoring and sharing information on effectiveness of adoption and implementation of specific adaptation activities to enable **adaptive management** among Hampton Road municipalities and state and federal agencies.

A knowledge management system, envisioned as a combination of structured dialogue and advanced information management strategies, will allow the municipalities and local, state and

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Attachment 15-A1



federal facilities in the Hampton Roads region to fully leverage their intellectual capital (institutional, social, human) in support of climate adaptation implementation objectives. The knowledge management system will provide a framework for a comprehensive inventory of the people, processes and enabling technologies directly related to support local climate change and sea level rise adaptation.

The Hampton Roads Adaptation Forum project intends to build upon the issues, concerns and adaptation strategies identified in previous sea level rise and inundation meetings, and studies in our region. Below is a table of general issues and concerns. We invite you to add to this list when you register for the Forum. Also below is a partial list of the materials and meeting/workshops we tapped to compile issues, concerns and adaptation strategies. We will provide a summary document two confirmed Forum participants.

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Some issues/concerns which have been expressed at previous stakeholder meetings (i.e., March 2012 ODU Engineering Forum; September 2012 NOAA/EPA/WRF Extreme Events Workshop)

- Modeling human responses to flooding;
- Adaptive management with limited discretionary authority;
- Promoting proactive planning/avoiding crisis management;
- Prioritizing investments under SLR scenarios;
- Facilitating cross-city communication, information sharing, and coordination;
- Enabling region-wide coordination and risk pooling;
- Obtaining consistent data collection protocols (e.g., precipitation data and projections are challenging for this Hampton Roads);
- Citizen behavior change, risk and communication.

Adaptation to climate change and SLR has started to be addressed in this area in a number of meetings, forums and plans listed below (this is a partial list):

- Climate Change in Hampton Roads: Phase III: Sea Level Rise in Hampton Roads, Virginia
http://www.hrpdcva.gov/Documents/Phys%20Planning/2012/HRPDC_ClimateChangeReport2012_Full_Reduced.pdf
- Initiating Adaptation Public Policy Development; Middle Peninsula Planning District Commission
http://www.mppdc.com/articles/service_centers/EnvironmentalCommunity%20Development/Phase_3_Climate_Change.pdf
- Overview of Sea Level Rise Planning Efforts on the Eastern Shore: Accomack-Northampton Planning District Commission
<http://www.virginia.edu/jen/docs/SLR%20Planning%20on%20ESVA%20presentation.pdf>

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- The Eastern Shore of Virginia: Strategies for Adapting to Climate Change
<http://conserveonline.org/workspaces/e-shore-va-cc-adaptation/documents/the-eastern-shore-of-virginia-strategies-for-0/view.html>
- Changing Tides: A Sea Level Rise Planning Analysis for Virginia Beach, VA
http://www.virginia.edu/jen/docs/BEATLEY_CLASSFINALREPORT.pdf
- How are other coastal communities addressing sea level rise?
http://www.virginia.edu/jen/docs/Keywood_SLR_Planning_forEmail.pdf

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