

Joint Subcommittee to Formulate Recommendations to Address Recurrent Flooding

Executive Summary (2014–2015)

Background

The Joint Subcommittee to Formulate Recommendations to Address Recurrent Flooding (the Joint Subcommittee) created pursuant to HJ 16 (2014) and SJ 3 (2014) is tasked with formulating recommendations for the development of a comprehensive and coordinated planning effort to address recurrent flooding, including recommendations for short-term and long-term strategies for minimizing the impact of recurrent flooding. Final recommendations will be presented to the 2016 Session of the General Assembly.

2014

The Joint Subcommittee held its initial meeting on July 22, 2014, in Richmond. Delegate Chris Stolle was elected to serve as chairman and Senator Mamie Locke was elected to serve as vice-chairman.

After opening remarks by Chairman Stolle and introduction of the Joint Subcommittee members, Brian Moran, Secretary of Public Safety and Homeland Security, was introduced. Secretary Moran described the ongoing work of the Secure Commonwealth Panel and the Governor's Climate Change and Resiliency Update Commission and pledged the cooperation of his office in working with the Joint Subcommittee.

The Joint Subcommittee met four times in 2014 and heard from a variety of informative individuals, including Col. Paul B. Olsen, P.E., Norfolk District Commander of the U.S. Army Corps of Engineers. Col. Olsen oversees the district's civil works infrastructure and military construction. Col. Olsen described to the Joint Subcommittee the role of his office and the manner in which they seek to identify mutual interests with the state and localities so as to better coordinate and cooperate on various projects. The Joint Subcommittee also heard from Jim Redick, the Director of Emergency Preparedness and Response for the City of Norfolk and a member of the Secure Commonwealth Panel. Mr. Redick encouraged Virginia to take the lead in determining how best to address the issues facing the Commonwealth related to recurrent flooding. Mr. Redick argued that with a unified effort, Virginia can set the standard that will be studied by others as these issues move to the forefront.

Other presenters during the Joint Subcommittee's first year included: Nicole Riley, Virginia State Director of the National Federation for Independent Business, who described to the Joint Subcommittee the impact of recurrent flooding on businesses; Bill Tibbens, Manager of Government and Industry Affairs with Farmers Insurance, who discussed recurrent flooding and the mitigation of risk; Bob Kerr, representing the Virginia Association for Commercial Real Estate and the Hampton Roads Association for Commercial Real Estate, who presented perspectives from the commercial real estate industry; and Steve Marzolf, ISP Director for the Virginia Information Technologies Agency, who presented

information regarding the use of LIDAR in Virginia. LIDAR is a mapping technology for examining the surface of the Earth using laser scanning that produces a three-dimensional image.

The Joint Subcommittee also met at Old Dominion University (ODU) in 2014 and heard from ODU's President John R. Broderick and Ray Toll, Director of Coastal Resilience at ODU. Mr. Toll stated that issues related to sea level rise have been a priority focus for ODU for the past five years and further noted that ODU created the Sea Level Rise Initiative in 2010 to facilitate research and education on sea level rise. The Joint Subcommittee also heard from Roy Hoagland, Director of the Virginia Coastal Policy Clinic at William and Mary School of Law, who presented an overview of legal issues related to local authority to take action regarding recurrent flooding and sea level rise and from Robert Bennett, Division Director of Dam Safety and Floodplain Management with the Department of Conservation and Recreation.

The Joint Subcommittee discussed a variety of topics for the purpose of making interim recommendations for the 2015 Session of the General Assembly.

2015

The Joint Subcommittee met four times during the 2015 interim. The Joint Subcommittee again heard from Col. Paul B. Olsen, P.E., Norfolk District Commander of the U.S. Army Corps of Engineers. Col. Olsen provided an update of Corps activities and explained available Corps funding programs. Col. Olsen, who is retiring from his position with the Corps, received thanks from the members of the Joint Subcommittee as well as members of the audience for his efforts and many accomplishments in the Norfolk District. The Joint Subcommittee was also addressed by Curtis Brown, Chief Deputy State Coordinator for the Virginia Department of Emergency Management (VDEM). Mr. Brown reviewed VDEM's pending application with the HUD National Disaster Resilience Competition (NDRC). The purpose of the grant program is "to provide resources to help communities plan and implement disaster recovery that makes them more resilient to future threats while improving quality of life and making communities more resilient to economic stresses or other shocks." (HUD NDRC Guidance) Sixty-seven applicants are eligible to apply for \$817 million from the general pool on the basis of an unmet need attributable to at least one of the five qualifying disasters between 2011 and 2013. The purpose of Virginia's grant application is to develop best strategies for building resilient communities across a range of environments by developing the model seaport region that derives its economic vitality from the water. The target area for the Commonwealth's effort is the Hampton Roads area, including the Eastern Shore. VDEM has submitted its application as part of Phase 1 and expected to hear from HUD soon regarding eligibility to compete in Phase 2 of the competition.

Gwynn Crichton, Senior Project Scientist with the Nature Conservancy's Virginia Coast Reserve addressed the Joint Subcommittee on enhancing coastal resilience on Virginia's Eastern Shore. The Virginia Coast Reserve focuses on land protection; managing, monitoring, and protecting shore and water birds; marine restoration; outreach and education; and coastal resiliency. A significant focus since 2008 has been on adapting to sea level rise and storm surge and looking at how coastal habitats can be part of a nature-based solution to dealing with sea level rise. David C. Dowling, Deputy Director of Dam

Safety and Floodplain Management and Soil and Water Conservation at the Department of Conservation and Recreation (DCR) provided a flood protection plan update to the Joint Subcommittee. Mr. Dowling explained that § 10.1-602 of the Code of Virginia sets out the powers and duties of DCR, including development of a flood protection plan for the Commonwealth. In 2005, in response to this requirement, DCR updated the Floodplain Management Plan for the Commonwealth of Virginia. Legislation passed during the 2015 Session provided that the flood protection plan be reviewed and updated by DCR on a regular basis, but at least once every five years. Also, the plan must be maintained in an online format so that it is easily accessible by others. Mr. Dowling stated that in June DCR assembled its Floodplain Management staff to review the legislation and the current plan and to brainstorm the best way to move to an online approach. Mary-Carson Stiff, Director of Policy for Wetlands Watch and Chair of the Coastal Virginia Community Rating System Workgroup, also addressed the Joint Subcommittee. Ms. Stiff discussed the Federal Community Rating System (CRS), a voluntary incentive program intended to encourage community floodplain management activities that exceed certain minimum requirements. As a result of CRS, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions. Ms. Stiff stated that additional resources are needed in order to encourage a better participation rate among Virginia localities, where fewer than 10% of eligible communities participate.

Other speakers during the Joint Subcommittee's second year included Col. Jason E. Kelly, the new Norfolk District Commander, U.S. Army Corps of Engineers; Whitney Katachmark, Principal Water Resources Engineer, Hampton Roads Planning District Commission; Lewis L. Lawrence, III, Executive Director, Middle Peninsula Planning District Commission; and Katerina Oskarsson, Management Analyst III, City Manager's Office, City of Norfolk. These speakers addressed the Joint Subcommittee on a variety of topics of interest to the mission of the Joint Subcommittee at a special meeting held at the Virginia Institute of Marine Science (VIMS).

The Joint Subcommittee received additional presentations during 2015 from Captain J. Pat Rios, Commanding Officer, NAVFAC Mid-Atlantic, who spoke on mitigation of recurrent flooding on U.S. Department of Defense installations; Adam K. Thiel, Deputy Secretary of Public Safety and Homeland Security, who discussed the effects on the Commonwealth from recent storms and the Governor's Climate Change and Resiliency Update Commission Report and Final Recommendations; Brian Rahal, Civil Engineer IV, Stormwater Section Lead, who discussed recurrent flooding issues in Northern Virginia; and Elizabeth A. Kersey, Assistant to the President for Local, State and Federal Government Relations, Old Dominion University, who discussed the Commonwealth Center for Recurrent Flooding Resiliency.

Interim Recommendations - 2015 Session

I. Topic: Ground water / Outfall ditches

A. Recommendation (ground water): Initiate a study by the Joint Legislative Audit and Review Commission to develop recommendations for a strategy to sustainably and equitably manage the coastal plain aquifer system in order to maintain its productivity and availability for the long term.

Background: Land subsidence has been identified as a component of recurrent coastal flooding. Over-pumping of groundwater from the coastal plain aquifer system has been identified as a contributor to land subsidence, declining groundwater levels, and increasing saltwater intrusion potential.

B. Recommendation (outfall ditches): The Virginia Department of Transportation (VDOT) shall inventory and record all drainage systems under their responsibility. The inventory shall be completed by a specified date and be made available to the public.

Background: The issue of recurrent flooding and inadequate drainage across the lower portions of the Virginia Coastal Zone has become problematic. Both public roadside ditch infrastructure and the interconnected private ditch system have failed, causing losses to private property and public infrastructure.

II. Topic: Real estate disclosure

Recommendation: As part of required disclosures, advise purchasers to exercise due diligence, including obtaining a flood certification and a lender determination of whether the property is located in a flood zone and whether flood insurance is required.

Background: These changes would ensure that potential buyers are identifying issues and getting the most up-to-date information earlier in the transaction.

III. Topic: Floodplain Management Plan

Recommendation: Update Virginia's Floodplain Management Plan.

Background: The Commonwealth's initial Floodplain Management Plan has not been updated since 2005. With changing circumstances and access to new information, it would be beneficial to have the plan routinely updated and easily accessible by the public in an online format. It was also suggested that the Department of Conservation and Recreation be encouraged to work with the Joint Subcommittee in seeking input for preparation of the plan update.

IV. Topic: State Resiliency Officer

[The recommendation below was not adopted; rather it is recommended that the Governor create such a position.]

Recommendation: Designate a State Resiliency Officer.

Background: As with any program or incident, it is essential that an individual be identified as the lead in order to give direction and ensure accountability. Any resiliency coordinator should be closely aligned with the Secure Commonwealth Panel and, in order to better assure consistency and continuity, Virginia should consider creating a full-time career position.

V. Recurrent flooding resiliency fund

Recommendation: Create or authorize a recurrent flooding resiliency fund, a low-interest loan program designed to help residents who are subject to recurrent flooding.

Background: Connecticut has created a similar program that provides loan assistance to homeowners and business owners located in flood-prone areas. In the Connecticut plan, funds can be used to elevate or flood-proof primary and secondary single homes, one- to four-unit owner-occupied rentals, and businesses. The funds will be made available to some property owners who are ineligible for federal assistance.

The Joint Subcommittee also discussed other potential proposals related to real estate disclosure and land use authority. It was determined that those issues would be carried over to the 2015 interim for further consideration.

Interim Recommendations - 2016 Session

I. Topic: Continuation of study

Recommendation: That the Joint Subcommittee be extended for two additional years and renamed to Joint Subcommittee on Coastal State Resiliency and Recurrent Flooding.

II. Topic: Living shorelines

Recommendations:

A. Living shorelines are shoreline stabilization techniques that use natural habitat elements like grasses and oysters to make properties more resilient to coastal flooding and erosion. They provide an alternative to "hard armoring" approaches such as bulkheads and revetments that can often divert flooding to another coastal area and increase erosion. Section 28.2-104.1 of Code of Virginia provides that living shorelines are the preferred alternative for stabilizing shorelines in the Commonwealth. To encourage the use of living shorelines, the Virginia Marine Resources Commission (VMRC) has established a general permit authorizing certain living shoreline approaches. However, some living shoreline treatments are so site-specific they continue to require individual permits. Living shorelines are sometimes more expensive than traditional techniques and some contractors are less comfortable constructing them. HB 1734 (2015) allowed the Water Facilities Revolving Fund to make loans to localities to install living shorelines or make loans to landowners who wish to do so. VIMS and VMRC are working to educate contractors. Another incentive that may further encourage the use of living shorelines is the establishment of a cost share program where the state would pay a portion of the cost for landowners who choose to install living shorelines. This would be administered by VMRC and could be offered either on a first-come, first-served basis or through a system of identifying priority areas or practices that would receive a higher priority for funding.

B. Under § 58.1-3666 of the Code of Virginia, homeowners have to place an easement over their land and argue with the BOS/COR for "tax relief" for wetlands, as described below. Recommendation: § 58.1-3666 could be easily modified to add "any living shoreline project not prohibited by local ordinance and approved by VMRC or the applicable local wetlands board that satisfies the definition of a living

shoreline consistent with § 28.2-104.1 shall qualify for full exemption of such taxation by local governments."

III. Topic: Resiliency Officer

Recommendation: That the state establish a stand-alone resiliency officer / an Assistant to the Governor for Commonwealth Adaptation

IV. Topic: Agency plans for adaption

Recommendation: Require via legislation that all Commonwealth of Virginia agencies adopt adaptation plans and report them annually to the General Assembly oversight committees with coordination by the Resiliency Officer.

V. Topic: Transportation funding decisions

Recommendation: That the Resiliency Officer consider that sea level rise and recurrent flooding be addressed in transportation planning and funding decisions.

VI. Topic: Planning district commissions

Recommendation: That the Resiliency Officer consider that planning district commissions coordinate regional adaptation planning for sea level rise and recurrent flooding.

VII. Topic: Center for Coastal Resiliency

Recommendation: Support the development of the Center for Recurrent Flooding Resiliency (ODU/VIMS).

VIII. Topic: Funding of the 3 x 3 x 3 program

Recommendation: Support the funding of the 3 x 3 x 3 program.