

## CHAPTER 440

*An Act to designate the Commonwealth Center for Recurrent Flooding Resiliency jointly at Old Dominion University, the Virginia Institute of Marine Science, and The College of William and Mary.*

[H 903]

Approved March 11, 2016

Whereas, Old Dominion University, the Virginia Institute of Marine Science, and The College of William and Mary have joined together to provide critical applied research, policy, and outreach resources to support the efforts of the Commonwealth and its political subdivisions to build resilience in the face of rising water throughout the state; and

Whereas, Old Dominion University, the Virginia Institute of Marine Science, and The College of William and Mary have developed the basis for a joint center of excellence in recurrent flooding resiliency, resulting in national leadership in this domain; and

Whereas, House Joint Resolution 50 and Senate Joint Resolution 76 (2012) directed the Virginia Institute of Marine Science (VIMS) to study strategies for adaptation, migration, and the prevention of recurrent flooding in Tidewater and Eastern Shore Virginia localities, resulting in Senate Document 3 (2013), entitled "Recurrent Flooding Study for Tidewater Virginia"; and

Whereas, VIMS found that recurrent flooding is occurring repeatedly in the same area over time due to precipitation events, high tides, or storm surges throughout coastal Virginia and is predicted to worsen, resulting in more frequent or larger-scale flood events; and

Whereas, VIMS found that "[i]mpacts from flooding can range from temporary road closures to the loss of homes, loss of businesses, property and life. In coastal Virginia, the cost of large storm damage can range from millions to hundreds of millions of dollars per storm. With a long history of flooding from coastal storms, there is a keen interest in Virginia to identify areas of potential flooding and establish measures or adaptation strategies to reduce the impact of future flood events"; and

Whereas, VIMS found that a review of global flood management strategies suggests that it is possible for Virginia to have an effective flood response, but such efforts may take 20 to 30 years to effectively plan and implement; and

Whereas, VIMS has developed state-of-the-art storm surge models capable of predicting street-level flooding associated with storm events that can be used to inform planning and emergency preparedness; and

Whereas, Old Dominion University (ODU) has prioritized interdisciplinary and applied research in areas impacting recurrent flooding and resilience in Virginia, demonstrated through the Hampton Roads Sea Level Rise Adaptation Forums; the Virginia Modeling, Analysis, and Simulation Center (VMASC); the Center for Coastal Physical Oceanography (CCPO); the Hampton Roads Intergovernmental Pilot Project; the Hampton Roads Sea Level Rise and Adaptation Forums; and other programs and initiatives; and

Whereas, ODU CCPO researchers identified a "hot spot" of accelerated sea level rise along the East Coast of the United States, including Coastal Virginia, resulting from a diminished Gulf Stream; and

Whereas, ODU VMASC researchers have modeled evacuation responses in vulnerable and medically fragile populations, providing information to facilitate better policies and decision making; and

Whereas, ODU VMASC researchers are actively designing models to facilitate planning practices for increased housing recovery and resilience in the event of a severe storm event; and

Whereas, the Hampton Roads Intergovernmental Pilot Project convened by ODU has effectively brought together federal, state, regional, municipal, and community partners to develop a framework for a whole of government and whole of community approach to resilience throughout the Commonwealth; and

Whereas, the Virginia Coastal Policy Center at The College of William and Mary provides legal and policy analysis of ecological issues affecting the state's coastal resources, providing education and advice to decision makers throughout Virginia; and

Whereas, localities included in the Hampton Roads Planning District Commission are required to incorporate into the next scheduled and all subsequent reviews of its comprehensive plan strategies to combat projected relative sea level rise and recurrent flooding with assistance from Old Dominion University, the Virginia Institute of Marine Science, and other agencies of the Commonwealth; and

Whereas, VIMS offered several recommendations, including that the Commonwealth, working with its coastal localities, (i) begin comprehensive and coordinated planning efforts; (ii) initiate identification, collection, and analysis of data needed to support effective planning for response efforts; and (iii) take a lead role in addressing recurrent flooding in Virginia for the following reasons: (a) accessing relevant federal resources for planning and mitigation may be enhanced through state mediation, (b) flooding

problems are linked to water bodies and therefore often transcend locality boundaries, and (c) prioritizing flood management actions must be based in part on risk; and therefore, the Commonwealth must oversee the necessary studies to determine adaptation strategies as well as implementation of the agreed-upon strategies; and

Whereas, the Joint Legislative Audit and Review Commission (JLARC) study mandated by House Joint Resolution 132 (2012) and presented on October 15, 2013, entitled "Review of Disaster Preparedness Planning in Virginia," stated, "The state generally has strong disaster response plans, but deficiencies in evacuation and shelter plans may compromise the safety of the Hampton Roads population during a catastrophic disaster"; and

Whereas, the JLARC study further noted that if four key assumptions in the state's current evacuation plan do not hold, "timely hurricane evacuations could be compromised," placing citizens at risk after the storm; and

Whereas, the flooding affects areas outside of the Atlantic and Chesapeake Bay watersheds, as experienced in 1969, when Hurricane Camille spawned destruction and the loss of lives in Nelson County as well as severe flooding in the Valley, and in 1972, when Hurricane Agnes notably affected Central and Southwest Virginia; and

Whereas, many Virginia communities regularly battle recurrent flooding from nearby rivers and runoff as well as flooding associated with aging public and private dams; and

Whereas, a number of Virginia-based federal (including military), state, regional, and local agencies, private and not-for-profit groups, and colleges and universities are actively examining issues resulting from recurrent flooding in Virginia's coastal communities and investing in specific flood mitigation strategies; and

Whereas, the Virginia Housing Commission studied this issue through its Housing and the Environment Work Group and found that zoning, building codes, and planning issues will all be affected by recurrent flooding; and

Whereas, House Joint Resolution 16 (2013) established a joint subcommittee to formulate recommendations for the development of a comprehensive and coordinated planning effort to address recurrent flooding; now, therefore,

**Be it enacted by the General Assembly of Virginia:**

**1. § 1.** *That the Commonwealth Center for Recurrent Flooding Resiliency (the Center) be designated jointly at Old Dominion University, the Virginia Institute of Marine Science, and The College of William and Mary. The Center shall serve, advise, and support the Commonwealth by conducting interdisciplinary studies and investigations and provide training, technical and nontechnical services, and outreach in the area of recurrent flooding and resilience research to the Commonwealth and its political subdivisions.*

*The Commonwealth and any agency or political subdivision thereof may designate the Center to conduct special studies and to develop, integrate, coordinate, and share federal, state, local, and nongovernmental data, best practices, regulations, models, plans, projects, and other means for increasing resilience and enabling short-term and long-term decision making in the Commonwealth.*

*The Commonwealth and any agency or political subdivision thereof may designate the Center to maintain liaison with appropriate agencies of the federal government or respond to opportunities provided by those agencies on behalf of the Commonwealth as may arise.*

*All state agencies, political subdivisions, and authorities are encouraged to consult with the Center on matters of information, data, and services to improve methods of data sharing, efficiency, and resilience within the Commonwealth.*