

# Commonwealth Center for Recurrent Flooding Resiliency

Elizabeth Kersey, Old Dominion University

*November 9, 2015*



# Why a state Center?

- Hampton Roads is 2<sup>nd</sup> most **vulnerable** U.S. population center at risk to sea level rise – but flooding affects the entire Commonwealth, directly or indirectly
- University partnership provides **coordinated research & technical support**
  - Led by **ODU + VIMS**
  - **Non-partisan** brokers of **expertise**
  - Opportunities for other Virginia Universities
- **Leverage** state Center to bring **federal funding opportunities** to Virginia
- National Model: Parallel **federal effort** with Virginia's Congressional Delegation

# Existing National Recognition

Secretary John Kerry will visit ODU campus on November 10<sup>th</sup>. He will meet with ODU and VIMS faculty on November 10<sup>th</sup>, and speak to an audience in the Ted Constant Convocation Center about National Security & Climate.

Video Clip of Announcement Available:

<http://www.c-span.org/video/?c4558906/kerry-visit-odu>



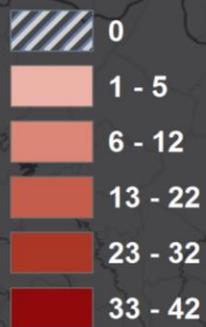
The background of the slide is a light gray gradient. In the top-left and bottom-right corners, there are several realistic-looking water droplets of various sizes, some overlapping. The main text is centered on the slide.

# **Water Knows no Political Boundaries:**

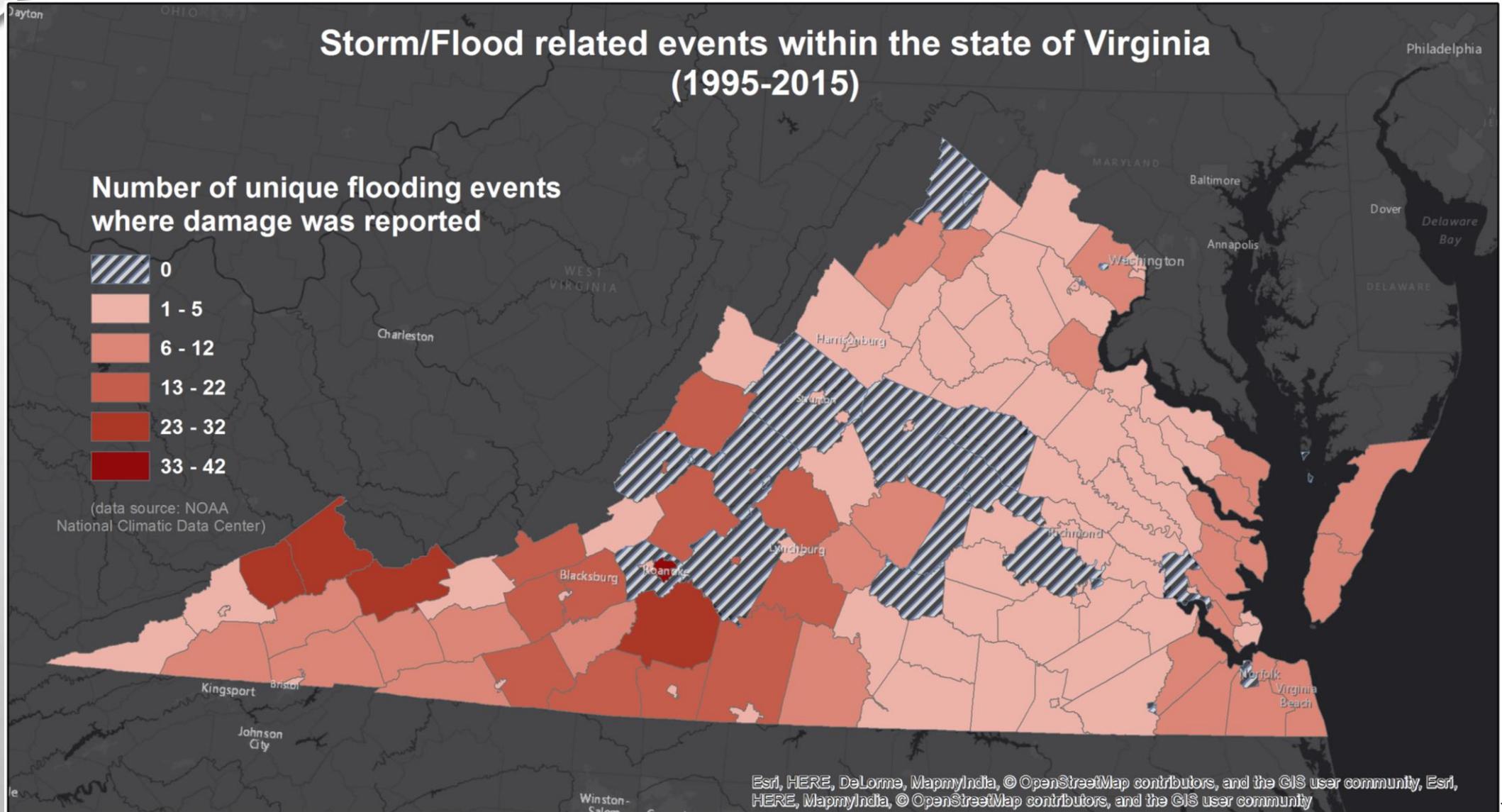
Flooding affects the entire  
Commonwealth

# Storm/Flood related events within the state of Virginia (1995-2015)

Number of unique flooding events  
where damage was reported



(data source: NOAA  
National Climatic Data Center)



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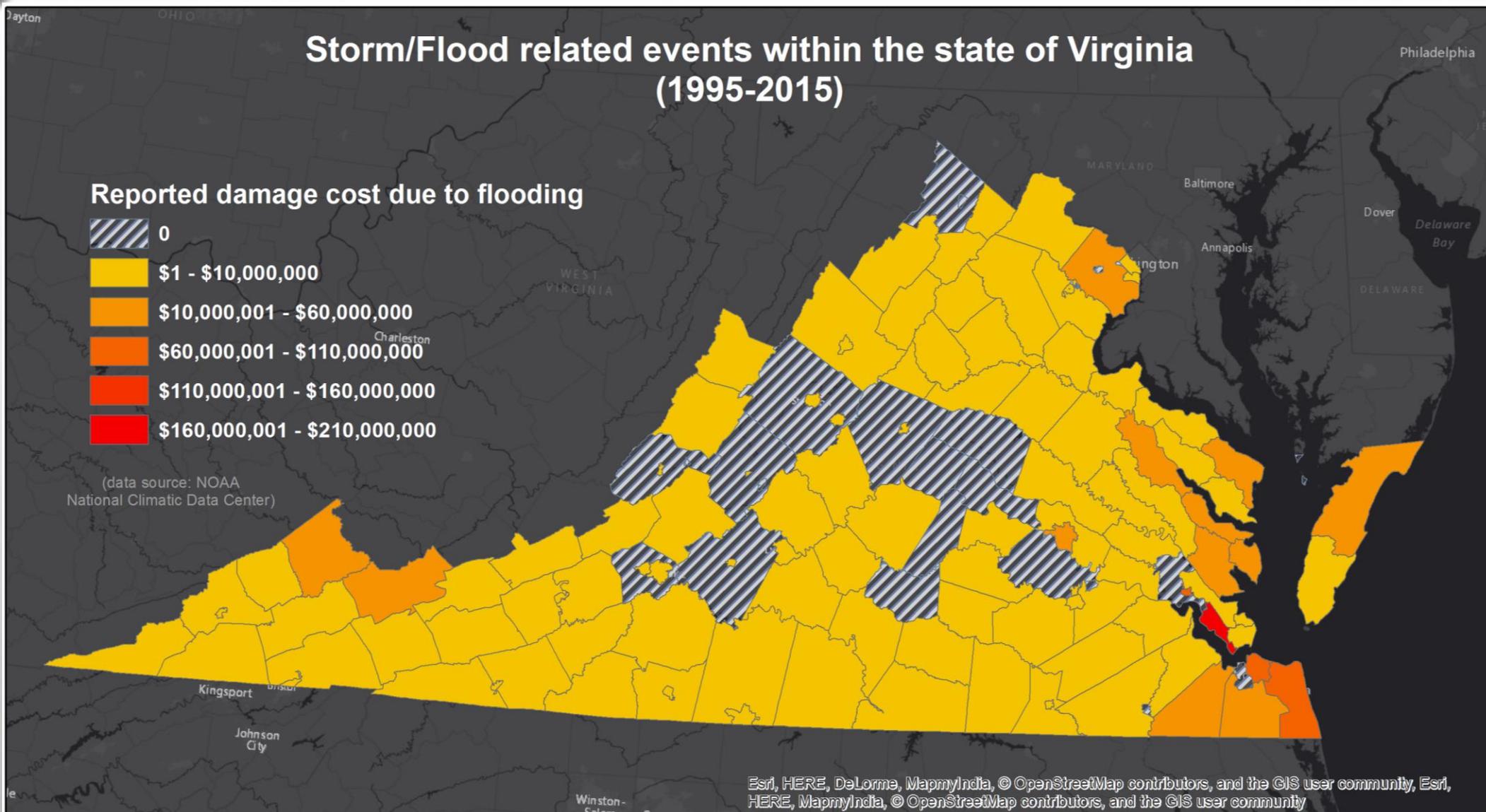
Data From NOAA's National Climatic Data Center, <http://www.ncdc.noaa.gov/stormevents/>

# Storm/Flood related events within the state of Virginia (1995-2015)

## Reported damage cost due to flooding



(data source: NOAA  
National Climatic Data Center)



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Data From NOAA's National Climatic Data Center, <http://www.ncdc.noaa.gov/stormevents/>

# Full Partnership: Building on **Complementary Strengths**

## **ODU**

- Socio-Economic Modeling & Impact Analysis
  - Modeling & Simulation
  - Convening Stakeholders
- Coastal Physical Oceanography
  - Engineering
  - Public Health

## **VIMS**

- Data Integration of Water levels
  - Storm-Surge Modeling
  - Water Quality Modeling
  - Living Resources Assessment
- Public Policy and Legal Analysis (W&M)



# OLD DOMINION UNIVERSITY

## I D E A FUSION

- **University-wide Priority** since 2010 – CCLRI
- HUD National Disaster Resilience Grant
- Intergovernmental Pilot Program
- VMASC
  - Emergency Evacuation Modeling
  - Medically Fragile Populations
  - Housing Resilience Modeling
- CCPO – Hot Spot of Sea Level Rise
- Mitigation and Adaptation Research Institute





- **Largest Marine Science Institute** focused on Chesapeake Bay and Coastal Virginia
- Recurrent Flooding in Tidewater Virginia Report
- Street-Level Storm Surge Modeling
- On-line resiliency planning tools for local government
- Virginia Coastal Policy Center

# Center for **Recurrent Flooding Resiliency**:

*Leverage the strengths of **ODU + VIMS/W&M** to provide **coordinated research & technical support** for planners and decision makers with **tools** for **adaptation and mitigation** in the field of **recurrent flooding and resilience** across **Virginia**.*

# Role of the Center: Increasing **Resiliency** In Virginia

- Consult with Commonwealth, agencies, PDCs, municipalities, and other organizations to enable short and long-term decision making:
  - **Integration** & coordination of federal, state, local, and nongovernmental **data**;
  - Evaluation of **best practices** to increase resilience;
  - Build upon successful **applied** research and conduct **interdisciplinary studies**;
  - Engage **stakeholders** across Virginia; and
  - Provide **outreach, education, training, technical, and non-technical services**.
- Liaise with federal agencies and pursue federal & other **funding** opportunities enhancing resiliency in Virginia.

# Proposed: Recommendation of the Joint Subcommittee

Support a Resolution Designating the  
**Commonwealth Center for Recurrent Flooding Resiliency**  
Jointly @ ODU & VIMS/W&M.

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