

Virginia Universities

Our Role in Resilience





Climate Change and Sea Level Rise Initiative

ODU's **Climate Change and Sea Level Rise Initiative (CCSLRI)** was established in 2010 to facilitate research and education in all aspects of climate change and sea level rise.



The **Mitigation and Adaptation Research Institute (MARI)** is an outgrowth of the CCSLRI efforts. MARI works with stakeholders within and outside the region to generate knowledge that can enable them not only to reduce the negative aspects of climate change and sea-level rise, but also to make positive use of the opportunities in the coming changes.



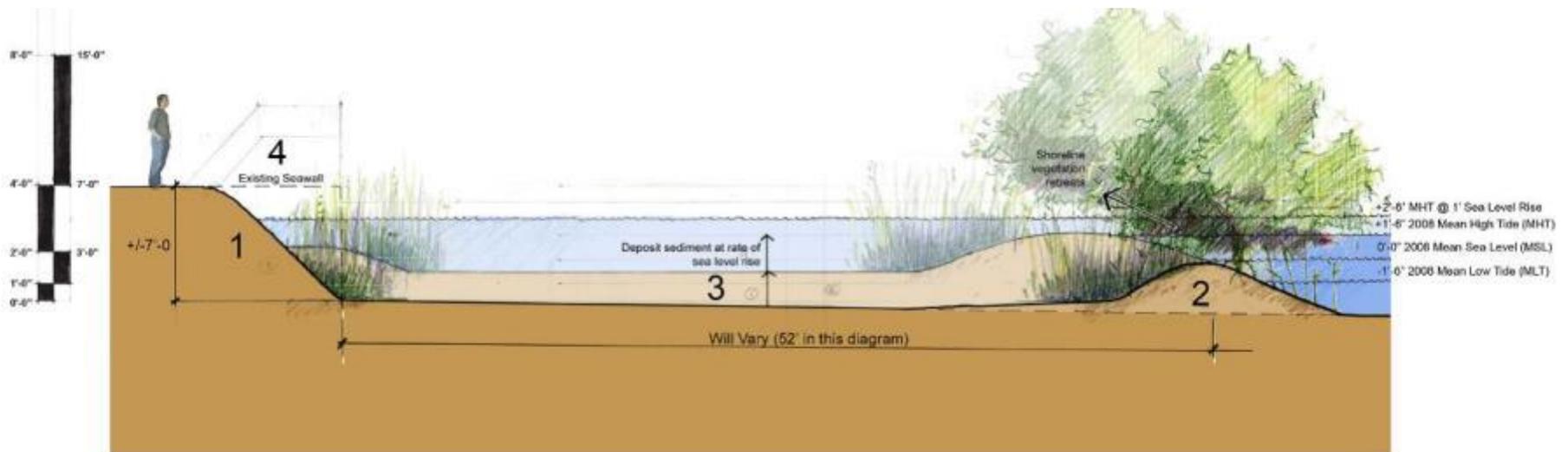
Center For Sea Level Rise

The **Center for Sea Level Rise** is the home base for the Intergovernmental Pilot Project based at ODU. Currently underway, the pilot is a two-year project to develop a regional "whole of government" and

"whole of community" approach to sea level rise preparedness and resilience planning in Hampton Roads that also can be used as a template for other regions.

Wetlands Watch funding from Virginia Sea Grant

Wetlands Watch has been awarded funding from Virginia Sea Grant to help a Hampton Roads neighborhood design a sea level rise/flooding adaptation approach. Partnering with Hampton University's Architecture Department, Old Dominion University's Engineering Department, Hampton Roads Green Building Council, the Urban Land Institute Chapter in Hampton Roads, commercial architects, landscape architects, engineers, developers and ecosystem experts from the Virginia Institute of Marine Science.





Improve Economic Vitality

Adaptation design can energize the economy:

- ◆ New Orleans created 2,800 jobs between 2011 and 2013 in the area of "water management."
- ◆ Almost 4% of the Gross Domestic Product of the Netherlands results from their adaptation work around the world.

Virginia must develop expertise and create jobs to solve its problems – then we can capitalize on our experience by exporting our capability.



Keys to Winning Phase II

- Thematic Coherence
- Leverage
- Focus on Lower Income Housing
- Community Engagement
- Tie-in with Qualified Areas
- Regional Coordination/Collaboration
- Statewide and National Implications
- Rockefeller, Rockefeller, Rockefeller



How Can Virginia Universities and Colleges Help?

- Partner with Qualified Communities and the Region to Develop Overall Theme and Specific Projects within that Theme
- Sources of Leverage
- Sources of Expertise and Capabilities
- Sources of VA Track Record
- Contribute Effort for Specific Tasks in Producing the Application



How Can Virginia Universities and Colleges Better Coordinate their Resilience Efforts in Statewide Initiatives such as NRDC?

Virginia's Approach

THRIVE: Resilience In Virginia

Unite The Region

- Create an alliance of local governments
- Build public/private outreach, connectivity and consensus
- Focus on common challenges and opportunities

Create Coastal Resilience

- Leverage existing studies and projects
- Incorporate physical, social, economic effects
- Build a Coastal Resilience Lab/Accelerator

Strengthen Vulnerable Neighborhoods

- Emphasize known vulnerable populations
- Align with HUD's Livability Principles
- Create micro - neighborhood preparedness plans

Improve Economic Vitality

- Concentrate expertise, resources, innovation
- Focus on: Maritime, Storm, Flood, & Rising Water Resilience
- Build businesses and a labor force to manage water

Build Water Management Solutions

- Generate cross-discipline impacts
- Reduce emergency response burdens
- Measure improvement quantitatively