

**Adaptive Planning for Flooding and Coastal Change in Virginia:
Legal and Policy Issues for Local Government**

Plenary Session, Friday, September 13, 2013, 9:30 – 10:30 a.m.

**College of William & Mary, School of Education, Matoaka Woods Room
*301 Monticello Avenue, Williamsburg***

**Other Mayors Presenting Remarks During Plenary:
Paul Fraim – Norfolk & Molly Ward - Hampton**

Thank you for the invitation to come here today and join with some of my fellow Mayors in Hampton Roads to share with you how Virginia Beach is currently addressing flooding, storm surge and rising waters, and to tell you about the real challenges we face in doing so.

We welcome the opportunity to be a part of this important conversation with other Coastal Virginia localities, researchers at VIMS, and the legal minds here at the College to learn about our collective situations and needs, and decide how best we can partner in approaching our state legislators to ask for their assistance in helping us get the job done.

(Slide 1):

Virginia Beach is uniquely blessed with an abundance and variety of shoreline environments. These include the Oceanfront Resort and Sandbridge Beach, communities along Owls Creek, Rudee Inlet and the Atlantic Ocean, the tidal waters of the Chesapeake Bay and its tributaries along the Elizabeth and Lynnhaven River systems, and our tidal and wind-driven Southern Watersheds along Back Bay and the North Landing River.

(Slide 2):

Along these waterways, we have many fine residential neighborhoods and commercial centers, resort beaches, federal military assets, federal, state and local park lands, and a vibrant agricultural lifestyle—all of which bring real quality of life value to our residents, businesses, and visitors and contribute greatly to our local, state and federal economies.

We take protecting our citizens and visitors, our waterways, and our shoreline environments very seriously. We have a vast array of land use plans and policies, development regulations, and programs currently in place.

We are addressing hurricane protection, stormwater management and flooding needs through capital projects using local, state and federal resources, and through collaborative initiatives with our universities and community partners wherever we can. We are also learning from our neighbors in Coastal Virginia, other coastal states, our federal and state agency partners, and local watershed conservation organizations how we can do a better job.

(Slide 3):

Here's a snapshot of the various plans and policies we use. Our Beach Management Plan guides our strategies for beach replenishment. Our award-winning 2009 Comprehensive Plan contains an Environmental Stewardship element, acknowledging natural and man-made hazards attributable to —*and* which contribute to **global climate change, sea level rise, and coastal flooding and floodplain management** and what we should do about them through our long-range physical planning. It also contains a Southern Watersheds Management Plan.

Most recently, we have added to our Comprehensive Plan a suite of eight Strategic Growth Area Master Plans, which address future land use, infrastructure, stormwater management, water quality improvement, and open space needs as we re-shape and grow these areas over time. We partnered with the Hampton Roads Planning District Commission in 2011 to update the South Hampton Roads Regional Hazard Mitigation Plan.

The Quality Physical Environment element of our City’s Strategic Plan now contains an initiative to address Recurrent Flooding. And in 2013, we adopted “A Community Plan for a Sustainable Future” — our vision for a triple-bottom line of **economic, social and environmental sustainability**. Together, these plans and policies provide us with a comprehensive blueprint for action and provide a basis for guiding our daily operations to protect our citizens and our shoreline environments.

(Slide 4):

To implement our plans and policies, we apply a variety of development regulations in the form of local ordinances to both private and public sector development activity. These include: floodplain regulations in our Site Plan Ordinance, which we are in the process of updating to create a stand-alone Floodplain Ordinance in accordance with FEMA standards, and ordinances that address Chesapeake Bay Preservation, wetlands, coastal primary sand dunes, erosion and sediment control, stormwater management, and Southern Watersheds management.

(Slide 5):

We use an interdisciplinary and team approach on City staff, and work closely with our citizens through City Council appointed advisory committees and task forces. To give you some examples...

- Beach nourishment and management are jointly administered by the Departments of Public Works and Parks and Recreation.
- Coastal flooding and stormwater management are jointly administered by the Departments of Public Works and Planning.

- Our Recurrent Flooding and Severe Repetitive Loss Program is administered by our Office of Emergency Management in the Fire Department, with assistance from Public Works.
- Our Chesapeake Bay Preservation Area, Beach Management, Wetlands and Open Space Programs are administered by several City departments and Council-appointed Boards and Advisory Committees.

Some years ago, the Virginia Beach City Manager established the Clean Waters Task Force, and our City Council established the Green Ribbon Committee to address water quality matters. In recent years, we have turned our attention to creating an Energy Program and Joint Energy Committee to reduce the City's carbon footprint by setting goals for reducing municipal energy consumption.

We are also exploring options for alternative energy development through the newly formed Mayor's Energy Advisory Committee.

Just this year, an interdepartmental Floodplains Management Group was formed, consisting of the Departments of Planning, Public Works, Fire's Office of Emergency Management, and the Departments of Housing and Neighborhood Preservation, Parks & Recreation, Communications and Information Technology, Media and Communications, and our 311 Coordinators... to better understand how various departments respectively address the challenges of flooding and floodplains management and **to develop a more comprehensive and coordinated approach to floodplain management.**

(Slide 6):

To inform and assist with our policy making and implementation strategies, we are relying on a variety of data, computer modeling, state and federal grants, and university research. We are pleased to have new and more accurate Flood Rate Insurance Maps from FEMA, and regional LIDAR mapping from HRPDC. Our Center for GIS is using contour and elevation mapping and modeling to analyze coastal inundation impacts to our municipal infrastructure.

We are benefitting from greater public awareness raised by the Commonwealth's Recurrent Flooding Study prepared by VIMS, the HRPDC's Climate Change Studies, ODU and SeaGrant forums, and from academic student research by UVA through its Institute for Environmental Negotiation.

We are currently administering — with a whole lot of frustration, I might add — a **\$1.7 million dollar** federal grant from FEMA to elevate nine structures under the Severe Repetitive Loss Program in our Lynnhaven Colony neighborhood. Our Deputy City Manager Dave Hansen will be further addressing this and related issues during his presentation this afternoon at 3:45.

Through our Capital Improvement Program, we have funded hurricane protection and stormwater management projects along the Boardwalk and Atlantic Avenue at the Oceanfront and in the Shore Drive Corridor along the Chesapeake Bay. Under an agreement with the U.S. Army Corps of Engineers, we maintain an engineered flood channel to help eliminate flooding in upstream neighborhoods.

(Slide 7):

Our various partnerships are important because the City, in no way, can get the job done alone. At the local level, we rely heavily on the grassroots support, expertise and energy of various watershed protection organizations such as **Lynnhaven River Now**, the **Elizabeth River Project**, the **Chesapeake Bay Foundation**, the **Back Bay Restoration Foundation**, and our **citizen advisory committees**.

Our key regional partner is the HRPDC, which assists us with research, planning and grants. Our state and federal agency partners are critical to providing us with the technical resources and training we need, as well as financial resources to tackle our challenges. Our local and state universities help us in a special way with research, modeling, mapping, planning, and public outreach.

So, it's very clear that we embrace our natural resources and unique coastal environment, yet also understand the challenges that come with living in such a beautiful and vulnerable area. It's also clear that we have a relatively sophisticated approach, reflected in our planning, policies, regulations and programs administration, our professional staff capacity and resource allocation, and our many partnerships. Yet, despite all of this, we are not as well prepared as we need to be to address the full scope of projected realities in the Year 2100, and we can **and must** make continued improvements.

(Slide 8):

A lot of people are working hard together to do the right things. But, it can be difficult to navigate through it all. We must raise awareness through better communication — within City government, among our citizens, and with the various state, federal and community partners with whom we work —about the various plans and strategies we have in place, and what we're doing with them to protect our land and our people.

We can seek greater alignment of the tools in our toolkit to make sure we're maximizing efficiencies and not working at cross purposes. We will benefit from continued cross-disciplinary, interdepartmental dialogue among our professional staff and taking collective ownership for the challenges we face.

Since Norfolk has established a high-level coordination process that has been working together for a few years now... and Hampton has developed a highly effective public outreach and communication process on sea level rise issues... we can invite them both to sit with us and share their lessons-learned and successes.

In dialogue with our citizens, we can use the opportunity we have, beginning next year, with the next update of our Comprehensive Plan to dig deeper and explore the pros and cons of all the enabling authorities that have been granted to localities by the Commonwealth... to establish holistic policies and strategies that address the full spectrum of coastal adaption techniques applicable to our city.

We must be willing to consider all of our options, including:

- Avoidance of new development and redevelopment and planned, strategic retreat in those areas of our city where historic storm events, accurate mapping, and sound modeling to show us we are most vulnerable; and,
- Reinforcement or elevation in place where it makes sense.

We can strengthen our design standards for development and stormwater management... to reduce the harmful effects of stormwater runoff, yet still remain economically viable.

We can continue to press for multi-modal transportation choices for our citizens to reduce our dependence on automobiles, which contribute to greenhouse gases and a

warming planet... which in turn contributes to rising waters and more intense storms.

We can gain a better understanding of the potential legal challenges we face in implementing our strategies, and what additional local government enabling authorities might be needed to overcome these challenges. This conference is **the perfect start!**

We can learn about innovative measures being used in other Coastal Virginia localities and coastal states, and seek to apply them as appropriate to our context.

We can build on our strong relationship with the Department of Defense to protect our military installations and their missions, and to jointly manage our respective shorelines for the benefit of our whole community.

And we can identify additional partners.

We are willing to do these things to not only be a leader in Hampton Roads in planning for coastal resiliency, but also to be a model coastal city.

But, we could also become easily overwhelmed by the magnitude of the challenge if we don't approach it properly — and together with the Commonwealth — in the relatively short window of opportunity we have over the next 20 to 30 years, to carefully yet quickly plan for adaptation, and take the incremental measures necessary in order to be in the best position to live with higher waters come the Year 2100.

As individual localities, we simply do not have sufficient technical resources to define and address:

- Coastal flooding risks;
- A coordinated framework and structure with our regional, state and federal partners to respond and plan for the future in the most comprehensive way possible; and
- The financial resources to implement the solutions that will be needed.

(Slide 9)

Therefore, we join our voices with other Coastal Virginia localities in asking the Commonwealth to increase its assistance to us in the following ways:

(1) Recognize the risks of doing nothing, and step up and take a stronger leadership role to include flood and sea level rise management into the Commonwealth's purview.

(2) Identify a champion department or agency to play a coordination role and to be a resource for both localities and the federal government to partner with in planning and implementation.

(3) Take ownership of the necessary integration role between the localities and the various federal agencies, so we don't find ourselves at odds with one another and wasting precious time and resources while trying to help our citizens.

(4) Immediately begin comprehensive and coordinated smart flood control planning.

(5) Initiate identification, collection and analysis required to respond to recurrent flooding events.

(6) Take a lead role in addressing issues of access to federal funding and priorities that are consistent in addressing the various adaptation strategies.

And (7) Study the potential legal and policy barriers that can constrain us from doing the best job we can to protect our land, our people and our economy from flooding and flood risk and find equitable ways to break through them.

(Slide 10)

The benefits of the Commonwealth taking a leadership role are:

- Economies of scale;
- A bigger voice of advocacy;
- Enhanced coordination with federal agencies—such as the Department of Homeland Security and FEMA, the U.S. Army Corps of Engineers, HUD, and DOD, including the military installations in Coastal Virginia;

- The enhanced ability to obtain federal support and funding; and, realizing the synergies of multiple objectives, including hazard mitigation, emergency response, Chesapeake Bay preservation, reduction of TMDLs, and economic development and redevelopment.

The time to act is now!

I look forward to working with the Mayors and Chairs in the Hampton Roads region through the Hampton Roads Planning District Commission to seek this assistance from the Commonwealth through our regional legislative agenda. Mayor Fraim, Mayor Ward and I were successful in working together earlier this year, and going to Richmond to help bring additional transportation funding to Hampton Roads to keep Virginians and our economy moving upward.

Without doubt — with your help —we can be successful again.

We cannot afford to do nothing.

The safety and welfare of:

- Our citizens and their property;
- Our local, state and federal infrastructure, parkland, and military assets; and
- Our combined economic value to the Commonwealth

are too great.

Thank you.