

# *Legal & Policy Challenges for Planning for Marsh Migration and Wetlands Preservation*

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# Planning Ahead

**We are not good at it:**

- ▶ **Psychology 101 - Human Nature**
- ▶ **Our political system**
- ▶ **The needs of today demand our attention (and our \$\$)**
- ▶ **Over-reliance on real property tax revenue**

# Planning Ahead

**Made more complicated by multiple sets of SLR predictive data:**

- ▶ NOAA
- ▶ US Army Corps of Engineers
- ▶ IPCC (U.N.)
- ▶ U.S. NCA4 (global mean sea level has risen approx. 7-8” since 1900 & approx. 3” since 1993; predicted to rise .3m-2.5m by 2100)
- ▶ VIMS - [http://adaptva.com/info/virginia\\_sea\\_level.html](http://adaptva.com/info/virginia_sea_level.html)

# Planning Ahead

## Also made more complicated by legal issues:

### ▶ Boundary line and regulatory shifts

#### *Streams could 'come in and out' of WOTUS with climate change*

[Ariel Wittenberg](#), E&E News, June 3, 2019

“The Trump administration's proposed Clean Water Act rollbacks are meant to draw clean lines showing which waterways are protected and which are not.

**But climate change could complicate that as extended drought and increased storms change the hydrology of wetlands and streams nationwide.**

The proposed Waters of the U.S., or WOTUS, rule would erase federal protections for streams that flow only after rainfall or wetlands without surface water connections to larger waterways.

**But drought could dry up wetlands that are normally connected to waterways, and lower groundwater tables that normally feed streams. Increased rains could have the opposite effect.**

Under the Trump administration's proposal, that means streams and wetlands could "come in and out" of Clean Water Act jurisdiction, EPA officials told a Science Advisory Board working group, because Army Corps of Engineers jurisdictional determinations last only five years.”

### ▶ Potential locality liability

# Planning Ahead

## Also made more complicated by legal issues:

- ▶ Limitations of legal framework in Virginia
  - ▶ Private ownership to the MLW
  - ▶ Living Shorelines  
(<https://law.wm.edu/academics/programs/jd/electives/clinics/vacoastal/reports/livingshorelineimplementation.final1.pdf>)
  - ▶ CBPA  
(<https://law.wm.edu/academics/programs/jd/electives/clinics/vacoastal/reports/cbparesiliencefinal.pdf>)
  - ▶ Stormwater Management

# Planning Ahead - Current Options

- ▶ **Comprehensive plans that take future flooding into account**
  - ▶ Leave room for upland marsh migration
- ▶ **Zoning ordinances with incentives**
  - ▶ Norfolk's Zoning Ordinance: Coastal Resilience Overlay & Upland Overlay Districts
  - ▶ TDR programs
- ▶ **Buyouts/conservation easements**
- ▶ **Better use of living shorelines on long stretches of coastline**

# Planning Ahead - What We Need

- ▶ Regional solutions
- ▶ Adaptation, Mitigation, and Managed Retreat

*Left to Louisiana's Tides, a Village Fights for Time*

<https://www.nytimes.com/interactive/2018/02/24/us/jean-lafitte-floodwaters.html>

For the community of Jean Lafitte, the question is less whether it will succumb to the sea than when – and how much the public should invest in artificially extending its life.

By KEVIN SACK and JOHN SCHWARTZ FEB. 24, 2018 The NY Times

The policymakers “don’t place value on anything but the money, not the longevity of these communities, not the culture,” said Tracy Kuhns, 64, a longtime resident of the Barataria community across the bayou from Jean Lafitte. **“One of the problems in this country is that people don’t have any connection to where they live. People really want that. Why would you take it away from people who already have it?”**

**BUT RETREAT MEANS LOST COMMUNITY/TAX BASE**

# Planning Ahead - What We Need

## ▶ Other Incentive Ideas

- ▶ Fund the use of flooding areas for marsh migration, aquaculture sites, living shoreline studies?
- ▶ Create a fund to compensate flooding localities for lost tax revenue, like the Tobacco Region Revitalization Commission and the Tobacco Revitalization Revolving Fund?

Ivo Cassol, Brazilian politician: *“If the Amazon is the lungs of the world, they're going to have to pay us to breathe.”*

- ▶ A plan for Superfund & toxics storage sites in areas that flood/will become wetlands
- ▶ Virginia Coastal Resilience Master Plan

# Planning Ahead - What We Need

- ▶ **Public Education**
- ▶ **Funding**
  - ▶ **Using our Funds More Wisely - *Rethinking the NFIP***
- ▶ **Political Courage**
- ▶ **Holistic Thinking:**

# Planning Ahead - What We Need

- ▶ **Dual Goals: Sea Level Rise Resilience *AND* Water Quality Protection**

- ▶ e.g., CZM Program dredging grant

- ▶ **Multiple benefits**

- ▶ Stormwater management, CBPA, Bay TMDL, local TMDLs, flood buffers, habitat

- ▶ FEMA: coastal wetlands prevented approx. \$625 M in property damage from Hurricane Sandy

# **VCPC Resilience Funding Forum Survey Question:** **How should the Virginia Shoreline Resiliency Fund created by Virginia Code §10.1-603.25 be used? What is the best structure for it, to benefit the most people?**

- Provide no-interest loans to income constrained households for flood mitigation.
- Obviously fund it! Make grants available to municipalities for resilience projects that directly impact individual property owners.
- For local government projects, not individual homes.
- Ensure nexus exists to protect tax base. Encourage use of blue + green infrastructure used across riparian area regional administration by PDC's.
- Incentivize beneficial use of spoils from dredge projects.
- Ensure that the fund is transparent in nature during the process and emphasize blue-green infrastructure development.
- Ideally the fund would be administered at the state level, administration at the PDC level is possible and acceptable if loan recovery risk is solely accepted by the state. The fund should encourage the use of other funding mechanisms as match. The fund should be used also for outreach & education: whether through DCR SEAS or regionally through PDC's.

# Survey Results, continued

- Needs dedicated funding including local/regional match to support capital [illegible].
- To assist homeowners that have lost an existing shoreline protection structure, or an unprotected shoreline that has suffered enough loss to threaten the primary residential structure. Grants with 20% match.
- Research on performance matrix. Design standards. Subsidize construction cost. Grants to local governments.
- Revolving loan funds; leverage capital by issuing debt. Could it also serve in a state bond bank capacity to help localities issue debt/bonds for resilience related projects?
- Be used to match other grant funding.
- There are so many needs... One of the largest challenges is existing structures that don't have funding to mitigate/prepare. Is it better to fund structural level improvements or large projects that impact/protect lots of structures?
- Promote and attract [Future?] public [and?] private investment.
- Make sure the fund does not just replicate grants available through FEMA/VDEM, DCR Dam Safety, Flood Prevention & Protection Fund, or USACE.
- Competitive grant or bond process.
- Use fund to underwrite/guarantee finance mechanisms. Multiplies impact. Requires coastal strategic plan. Do not use it for USACE nonfederal match.