

Moving NNBF implementation forward in the Mid-Atlantic Region



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Overall Goal:

“To move the entire Mid-Atlantic NNBF community forward ...by answering the most pressing questions concerning their use, and by breaking down geographic and organizational silos in order to promote collaboration and coordination of efforts across states and stakeholders.”

Before



After 1 year



Partnership for the Delaware Estuary – Living shoreline project in Lewes, DE

Photo Credit: PDE, www.flickr.com

Objectives:

- Build awareness on the types and uses of NNBF
- Increase coordination across organizations/agencies/states
- Communicate the benefits of NNBF to local decision-makers
- Create a clear set of actions that can be taken to increase implementation of NNBF



Chesapeake Bay Program – pervious driveway

Photo Credit: www.flickr.com

Initial Research

- Stakeholder Interviews:
 - Gathering information about the work they do regarding NNBF
 - The challenges of implementing NNBF
 - Potential ways to address these challenges
- We are also doing a literature search for relevant NNBF research
- The information will be used to inform workshops to be held in May/June 2016

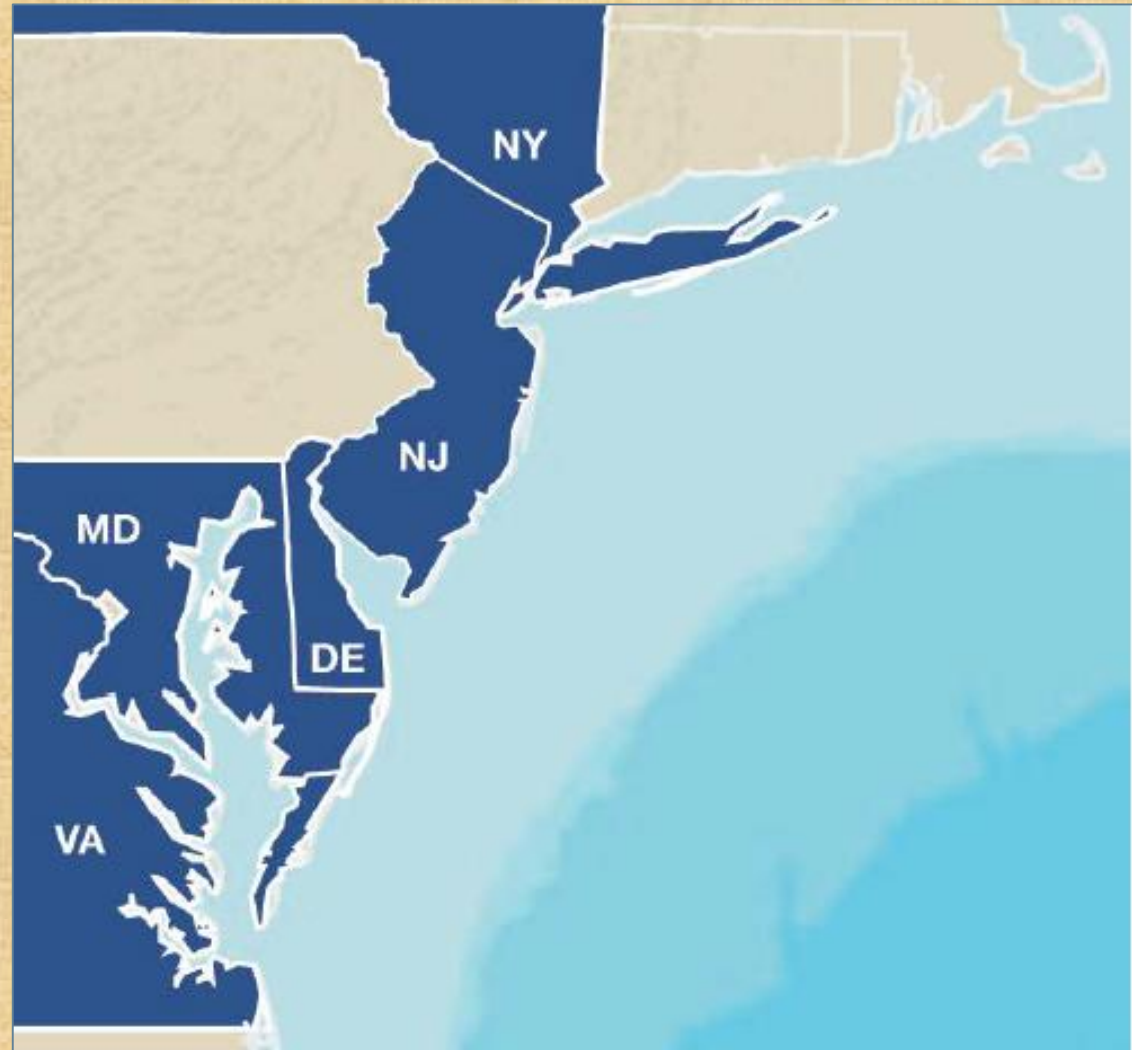


Examples of community engagement with living shoreline projects in the Delaware Estuary and Chesapeake Bay

Photo Credit: www.flickr.com

Stakeholder Interviews

- We've spoken with nearly 100 individuals in the Mid-Atlantic and Northeast regions
- We have learned that many site-specific challenges can be categorized into broader, regional issues, including:
 - Regulatory hurdles
 - Lack of performance metrics & monitoring
 - Private Landowners
 - Regional Coordination
 - Financing



Region covered by MARCO & the stakeholder interviews for this project.

Photo credit: MARCO Fact Sheet, February 2014

Available online: http://midatlanticocean.org/wp-content/uploads/2013/01/MARCO_Updated-Fact-Sheet-for-web.pdf

EXECUTIVE SUMMARY

ZONING FOR SEA-LEVEL RISE:

**A Model Sea-Level Rise Ordinance and Case Study
of Implementation Barriers in Maryland**

Pre-Publication draft – December 2012

By Jessica Grannis

Staff Attorney for the Georgetown Climate Center and Harrison Institute for Public Law

Challenge: Regulatory hurdles

- Need for clearer definitions within regulatory text
- Expense associated with lengthy permitting processes
 - Isn't much of an incentive to choose NNBF over gray infrastructure
- State-specific issues (e.g. VA Wetland Boards)

Challenge: Information Gaps

- Lack of funding for monitoring efforts
 - Informal observation tends to be the standard
- No standardized metrics for site selection, design protocol, or performance
 - Leads to a difficulty communicating the benefits of NNBF with the public, contractors, etc.



Example Living Shorelines Projects (A - Marsh Sill, B - Joint Planted Revetment, C - Oyster Reef, D - Reef Balls)

Photo Credit: John Miller, et al. Living Shorelines Engineering Guidelines. 2015.



Post-Sandy houses on the Jersey Shore.

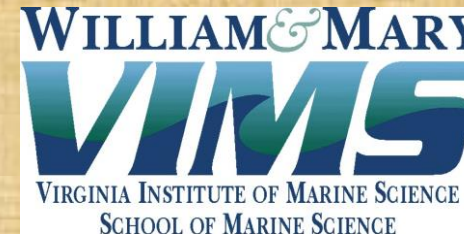
Photo Credit: www.flickr.com

Challenge: Private Landowners

- Majority of coastal lands are not publicly owned
- Difficult to interrupt the communication channels between landowners
- Contractor acceptance and understanding of NNBF is also important

Challenge: Regional Coordination

- Notable lack of communication between groups implementing NNBF
 - Site selection & design
 - Methods for overcoming challenges
- Lack of a regional source of funding



Challenge: Financing

- Often is a component of the other challenges described
- “Creative financing” from multiple sources is often available
- Question of sustainability for the long-term
- There is also a need for better incentives for the private landowner



Photo Credit: VIMS Living Shoreline project in Virginia; www.flickr.com

In spite of these challenges, a lot is going well...

- NNBF has captured the attention of citizens and regulators
- Increased education and outreach efforts
- Moving toward collaboration



Bottom left: Student helps plant a floating wetland in Virginia; Top right: VIMS teaching marsh informational board; Bottom right: Oyster reef in New Jersey, placed after Hurricane Sandy

Photo Credit: www.flickr.com

Broad Takeaways:

- This is an emerging and exciting field.
- NNBF implementation could be increased through:
 - a) A more efficient regulatory process,
 - b) Better informed site selection & design, and
 - c) Educated private landowners & contractors
- There is a growing body of expertise about resilience and restoration
- Many substantial local efforts and successes –
 - Presents the need to communicate these projects to the broader region.



Questions?

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