Living Shorelines:
Learning from Experience

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Erosion Is Not Necessarily a Bad Thing

In fact, it is a necessary process which helps to maintain beach, marsh and offshore habitats. The ecological health of the estuary depends on it.
Traditional Methods of Erosion Control Methods

Wooden Bulkhead

Rip-rap or Revetment
Excessive ??

Great Wall of China
### Shoreline Conservation Service: 1968-2015

<table>
<thead>
<tr>
<th>Items</th>
<th>Structural Projects</th>
<th>Living Shoreline Projects</th>
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</thead>
<tbody>
<tr>
<td># of Projects</td>
<td>484</td>
<td>475</td>
</tr>
<tr>
<td>LF of shoreline protected</td>
<td>201,649</td>
<td>200,036</td>
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<tr>
<td>Sq ft of marsh created</td>
<td>12,412</td>
<td>3,759,855</td>
</tr>
<tr>
<td>Amount of State loans</td>
<td>$31,511,944</td>
<td>$2,990,381</td>
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</tbody>
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Evolution of Living Shorelines

High-profile sills with no gaps
Evolution of Living Shorelines
Windy Hill Farm, Centreville, MD

Whale’s Tail Design"
Windy Hill Farm, Centreville, MD

Completed: July 2010
Cost: $226,302
Cost/Linear feet: $326
Spaniard Point, Centreville, MD

Before…

Completed: April 2010
Cost: $131,167
Cost/Linear feet: $205

“Crab Claw Design”

After
Spaniard Point, Centreville, MD
Spaniard Point, Centreville, MD
Ferry Point Park, Chester, MD

Completed: Dec 2013
Cost: $822,200
Cost/Linear feet: $135
Ferry Point Park, Chester, MD
Conquest Preserve, Centreville, MD

Completed: August 24, 2016
Cost: $271,473
Cost/Linear feet: $232
• Innovation is critical.

• Failure vs learning opportunity- objectivity!!!

• Fail early; accept it and adapt!!

• Need to stop designing projects for yesterday.

• Let’s build smarter, climate-resilient projects!!!
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http://dnr2.maryland.gov/ccs/Pages/livingshorelines.aspx