



Semi-Annual Success Story ("Section C")

October 2015 – March 2016

*submitted to the*

Office of Coastal Management/NOAA

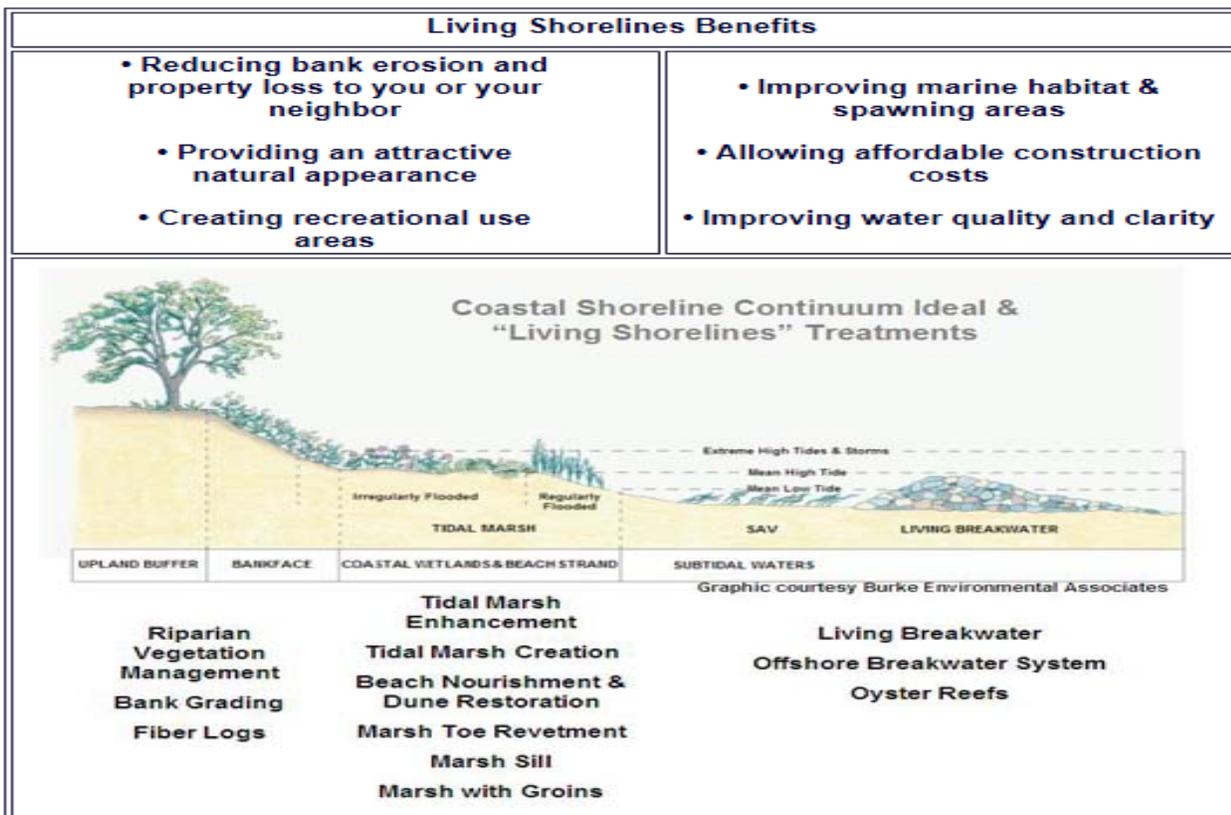
## Living Shoreline Revolving Loan Fund

**CZMA Performance Measure Area:** Coastal Hazards, Coastal Habitat Protection

**Geographic Location:** Coastal Zone of Virginia (Congressional Districts 1-4,7,8,10,11).

### Identification & Description of Issue:

Living shorelines, which are designed to control shoreline erosion while simultaneously enhancing estuarine habitats and improving water quality, were designated by the Virginia General Assembly in 2011 as the preferable shoreline management alternative. They have been proven to provide long-term erosion control along lower energy shorelines through the strategic use of plants, sand fill, stone and other materials. But although 80% or more of Virginia’s shorelines are suitable for living shorelines, traditional rock revetments and wooden or vinyl bulkheads are still the most commonly used erosion control technique. These structures typically sever the natural processes and connections between the water and upland areas.



A number of reasons have been cited for waterfront property owners' continuing preference for traditional techniques over newer, and superior, living shoreline solutions. These include unfamiliarity with the techniques, recommendations from contractors or neighbors, concern over long-term effectiveness or appearance, the availability of qualified contractors and other factors. Relative cost can also affect their choices, although the actual cost of construction varies depending on the techniques being used. Living shoreline may be more or less expensive than traditional techniques, or their costs may be very comparable. In any case, controlling shoreline erosion is typically a significant expense. Coastal resource managers have long supported the use of living shorelines and sought ways to provide financial incentives for their use.

### **How the Virginia CZM Program Was Involved:**

The Virginia CZM Program has supported better shoreline management for many years and specifically promoted the use living shorelines since 2006. This occurred with the adoption of the Program's first Shoreline Management Strategy under Section 309 of the Coastal Zone Management Act. Through this Strategy the CZM Program has helped coordinate state initiatives and provided funds for multiple projects to advance living shorelines. By supporting the acquisition of new data, development of new outreach programs, research initiatives and policy analysis, the Program has helped raise awareness of the benefits of living shorelines. These efforts were responsible, at least in part, for several important legislative actions that strengthen shoreline management laws and promote living shorelines.



*The far shore shows a traditional bulkhead with remnants of a fringe marsh. As the sea level rises, this marsh has nowhere to migrate and will be lost. The near shore shows a living shoreline with a gap in the rock sill to provide water access to the newly created marsh. A graded bank behind this marsh will allow marsh migration. (Photo: VIMS)*

For example, in 2012 the Virginia CZM Program awarded a grant to the Middle Peninsula Planning District Commission (MPPDC) to evaluate opportunities to establish a revolving loan fund for living shorelines. The project, entitled a “Feasibility Study to Incentivize Living Shoreline’s with a Revolving Loan Program”, provide almost \$35,000 to the PDC to complete three analytical reports. The first, completed by MPPDC staff, explored the legal framework for designing and capitalizing a living shoreline revolving loan fund. The second, subcontracted to the National Sea Grant Law Center, researched how other states have designed and administered similar programs, including lessons learned as their programs were implemented. The third report, subcontracted to the Virginia Institute of Marine Science, assessed the preferences of current and past permit holders in Virginia regarding the potential for a loan program. This study also evaluated the potential water quality and habitat benefits of successful implementation.

The analyses all pointed to the viability of a successful revolving loan program for living shorelines in Virginia and provided support for the 2015 Virginia General Assembly’s legislation adding construction of living shorelines to the list of activities that could be supported through the Virginia Clean Water Revolving Loan Fund (Virginia Code Section 62.1-229.5).

### **Qualitative Summary of Accomplishments and Outcomes:**

The Virginia Clean Water Revolving Loan Fund was created in 1987 to provide low interest loans for water quality improvement projects throughout the Commonwealth. Initially, loans were primarily for wastewater treatment plant improvements, but over the years the scope of the program has been broadened to include agricultural best management practices, brownfields, land conservation, stormwater management, and most recently living shorelines. Since its beginning the Fund has provided almost \$3 billion in loans, with approximately \$100 million available each year.

The 2015 legislation adding living shorelines to the list of activities eligible for loans specified that loans could be given to local governments for construction of qualified living shorelines as defined in state code. Construction could be undertaken directly by the local government, or the locality could set up a qualified program of its own to make secondary loans to private property owners. The Virginia Department of Environmental Quality (DEQ) has developed, with CZM staff input, guideline for loan applications and guidelines for local loan programs. The first local applications, either for local government projects or to set up local revolving loan funds, will be submitted to DEQ in July, 2016. Minimum loans to localities will be \$100,000 with no maximum. These loans could then be used for several local government projects over time, or to set up a local loan program for private property owners.

The availability of low interest loans for living shoreline construction, especially when combined with other recent state policy changes and incentives, has the potential to significantly affect shoreline management decisions and increase to use of living shoreline techniques to control erosion. Over the long term, and on a coastal zone-wide scale, this can be critically important for habitat preservation and water quality protection. This is particularly true given the increasing stress on coastal resources in the face of climate change and sea level rise.

### **Quantitative Summary of Accomplishment and Outcomes:**

Although it is too early to document, ultimately the key measure for the success of this initiative will be how many living shoreline are constructed because of the availability of low interest loans. While the level of local interest won't be certain until the first loans are made, several local governments have expressed interest. The Cities of Newport News and Norfolk, as well as the Middle Peninsula PDC (which qualifies as a local government) have already stated their interest. Other localities are likely to participate as the program becomes more well known and successes are documented.

### **CZM Funds Expended & Other Funds Leveraged:**

#### **Virginia CZM Program Grants**

FY 12 \$34,929	Middle Peninsula PDC	Three analytical reports on the feasibility of starting a revolving loan fund for living shoreline construction in Virginia.
----------------	----------------------	--

**Total Leveraged Funding** - Leveraged funds will accrue as loans are made, starting summer, 2016.

For more information on the living shoreline revolving loan fund contact Shep Moon, Virginia CZM Coastal Planner at [Shep.Moon@deq.virginia.gov](mailto:Shep.Moon@deq.virginia.gov)