



County of Fairfax, Virginia

MEMORANDUM

DATE: July 25, 2019

TO: Fairfax County Board of Supervisors

FROM: Stella M. Koch, Chairman *Stella M. Koch*
Environmental Quality Advisory Council

SUBJECT: Living Shorelines Loan Program

At the Joint Fairfax County Board of Supervisors/EQAC Meeting on July 9, 2019, Supervisor Gross raised the issue of implementing private stormwater and other improvements in older neighborhoods of the County. An impediment to addressing this issue is the need for neighborhood solutions involving multiple homeowners in lieu of individual homeowners attempting to address these issues independently.

A similar issue exists with implementing living shorelines in the tidal wetlands and beaches of the County. The Living Shorelines Loan Program, which is operated under the Virginia Clean Water Revolving Loan Fund (LCWRLF), is an optional source of funds provided to the County by the Commonwealth of Virginia to address some tidal shoreline implementation issues. The VCWRLF has already funded programs in two Commonwealth jurisdictions but has not yet been adopted by Fairfax County. EQAC, together with the Chairman of the Fairfax County Wetlands Board, have prepared the following information, which includes a discussion of the program, and recommends that the Board consider accepting the offer of funding by the Commonwealth in order to implement a Living Shorelines Loan Program.

Applicability to Fairfax County

Fairfax County has tidal wetlands and beaches in the Springfield, Lee, and Mount Vernon Magisterial Districts. These tidal wetlands and beaches have a variety of shoreline protection methods in place ranging from rip-rap to bulkheads to no protection. When a landowner wishes to modify tidal wetlands or beaches, they must obtain approval from the Fairfax Wetlands Board. By Commonwealth statute and County ordinance, the purpose of the Fairfax Wetlands Board is to prevent the despoliation and destruction of wetlands while accommodating necessary economic development in a manner consistent with wetlands preservation.

The Commonwealth set a goal of providing living shorelines to tidal wetlands and beaches where appropriate. Living shorelines utilize green infrastructure techniques and apply native vegetation alone or in combination with offshore sills to stabilize the shoreline. In 2015, after



PLANNING & DEVELOPMENT

Environmental Quality Advisory Council (EQAC)
c/o Department of Planning and Development, Planning Division
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5507
Phone 703-324-1380 TTY: 711
Fax 703-653-9447

www.fairfaxcounty.gov/planning-development/environmental-quality-advisory-council

years of study, the Virginia Institute of Marine Science (VIMS) issued the Fairfax County Shoreline Management Plan¹. This plan, in combination with the Center for Coastal Resources Management web portal, includes guidance on Best Management Practices for each property in Fairfax County adjoining tidal waters. The plan is intended to assist in addressing sea level rise. According to the plan, which contains specific property guidance, much of Fairfax County's tidal shoreline is suitable for living shorelines. The Fairfax Wetlands Board considers the VIMS guidance when considering each permit application for shoreline modification.

The Fairfax Wetlands Board supports the Commonwealth goal of employing living shorelines where feasible. However, the implementation of living shorelines has been difficult. One impediment is the difficulty of implementing living shorelines on individual properties. Most Wetlands Board applications involve a single property with limited shoreline. To be effective, living shorelines must be applied over a long reach of wetlands or beach. In Fairfax County, this would require multiple property owners to collectively apply for a living shoreline or for projects to occur across larger stretches of public land. While the Wetlands Board would prefer living shorelines, in cases that have come before the Board, no living shoreline has yet been implemented. This is because the Wetlands Board is reluctant to impose living shoreline requirements with substantial individual private economic impacts and limited public benefits on single property owners.

VIMS and the Commonwealth have recognized that for living shoreline goals to be achieved, a means of facilitating living shoreline applications for multiple adjacent property owners is needed. To help facilitate living shoreline applications for multiple properties, the General Assembly has authorized the use of the VCWRLF for low-interest loans and other incentives for the establishment of living shorelines to protect or improve water quality.

Under the living shorelines incentive program, Fairfax County could obtain a low interest loan from the VCWRLF that could be used as "Direct Funding" of County living shoreline projects and for "Local Plan" projects, in which Fairfax County would provide low-interest loans or other incentives to individual citizens to establish living shorelines.

At least two jurisdictions in the Commonwealth currently have living shoreline incentive programs. The Middle Peninsula Planning District Commission is providing low-interest loans to adjacent private landowners who have joined to address common shoreline issues under a Local Plan. Additionally, James City County is utilizing Direct Funding of a living shoreline for the Chickahominy Riverfront Park.

Under VCWRLF guidelines, Fairfax County would need a Local Plan that includes a Marketing and Outreach program and a plan for the administration of the loans.² The Marketing and Outreach program could provide the means and the funding to facilitate living shorelines over multiple adjacent properties. Multiple small projects facilitated by a County

¹ <https://scholarworks.wm.edu/cgi/viewcontent.cgi?article=1589&context=reports>

² See Appendix for James City County and Middle Peninsula Planning District Commission plans submitted and implemented under the Living Shorelines Loan Program.

Outreach Program would not only provide cost savings but would achieve the goal of implementing living shorelines. The program would require staff time to be successful.

VCWRLF program guidance is provided here:

<https://www.deq.virginia.gov/Portals/0/DEQ/Water/ConstructionAssistanceProgram/Living%20Shorelines%20Loan%20Guidelines-FINAL.pdf>

Additionally, EQAC has copies of the following reference documents related to the Living Shorelines Loan Program, which could be provided to the Board, if desired.

1. Virginia Clean Water Revolving Loan Fund Living Shorelines Loan Program Guidelines, State Water Control Board, April 2016.
2. James City County VCWRLF Living Shoreline Application – Direct Funding.
3. James city County Living Shorelines Application – Project Description.
4. Middle Peninsula District Commission VCWRLF Living Shoreline application.
5. Middle Peninsula District Commission Local Plan (Marketing, Loan Program, Administration).
6. Fairfax County Shoreline Management Plan, Virginia Institute for Marine Science, 2015.
7. Living Shoreline Design Guidelines for Shore Protection in Virginia's Estuarine Environments, Virginia Institute for Marine Science, 2017.

Conclusion

The Commonwealth set a goal of providing living shorelines to tidal wetlands and beaches to protect or improve water quality and prevent the pollution of state waters. We believe that the implementation of the Living Shorelines Loan Program would further the Commonwealth's goal and we recommend that Fairfax County participate in the program.

We thank you for your leadership in this area and your consideration of this recommendation.

cc: Bryan Hill, County Executive
Kambiz Agazi, County Environmental and Energy Coordinator
Randy Bartlett, Director, DPWES
Fairfax Wetlands Board