

PURPOSE

Develop a community-based social marketing strategy that will encourage shoreline property owners to adopt environmentally-sensitive practices in relation to shorelines, based on identified barriers and benefits to shoreline management within the Chesapeake Bay.



TWO PHASES

Phase One: Review, audit and inventory existing materials, identify behavior objective, define and research target audience(s) and design behavior change strategy. (2020)

Phase Two: Develop communications products and deliverables identified in the behavior change strategy that was created in Phase One. (2021)

PROJECT ACTIVITIES

1

Step One

Steering committee of shoreline and communications experts established (representing DE, MD and VA).

2

Step Two

Literature review to establish a foundation for further research efforts to improve shoreline management.



Step Three

Survey of shoreline management experts to determine relative impact of excessive erosion, water quality, habitat and climate resiliency on 11 behaviors identified in literature review.



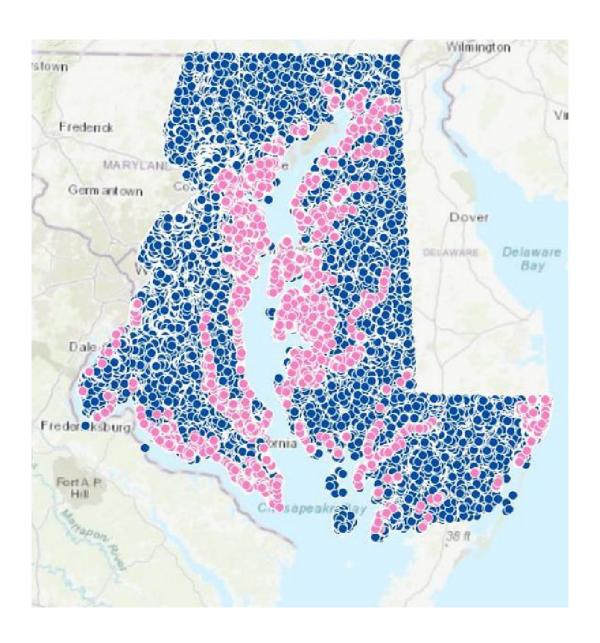
Step Four Survey of 1,600 shoreline property owners in Maryland and Virginia.



Behavior	Impact ²	Penetration	Probability	Applicability	Weight
Install buffer (upland/riparian) vegetation	7.40			1	7.40
Living Shoreline with sills	8.21			0.8	6.57
Living Shoreline with offshore breakwater	7.95			0.8	6.36
Living Shoreline - wetland vegetation	7.87			0.8	6.30
Living Shoreline with jetties/groins	7.81			0.8	6.25
Install beach nourishment	4.31			0.8	3.45
Armor - revetment with no vegetative component	3.42			1	3.42
Armor – breakwater with no vegetative component	3.16			1	3.16
Armor – jetties with no vegetative component	2.87			1	2.87
Armor – groins with no vegetative component	2.80			1	2.80
Leave an unarmored shoreline alone	3.47			0.8	2.78

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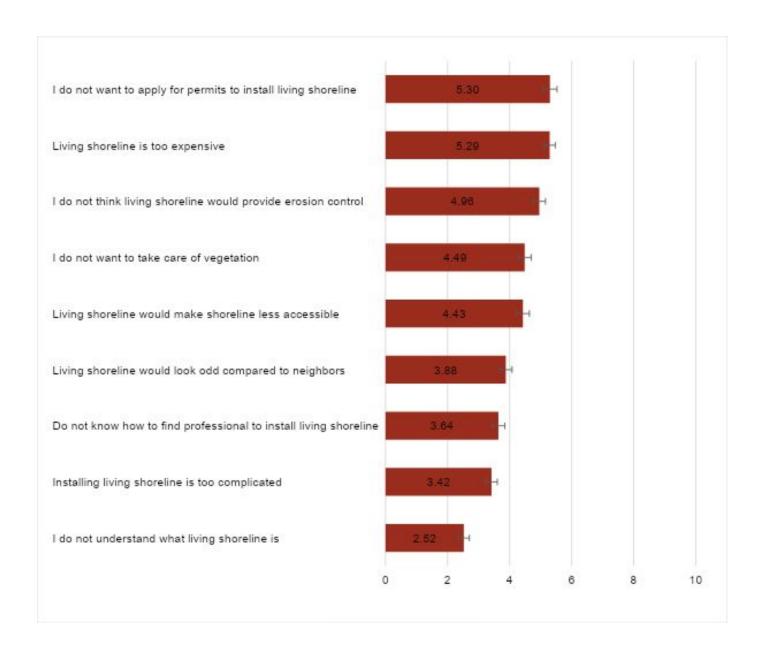
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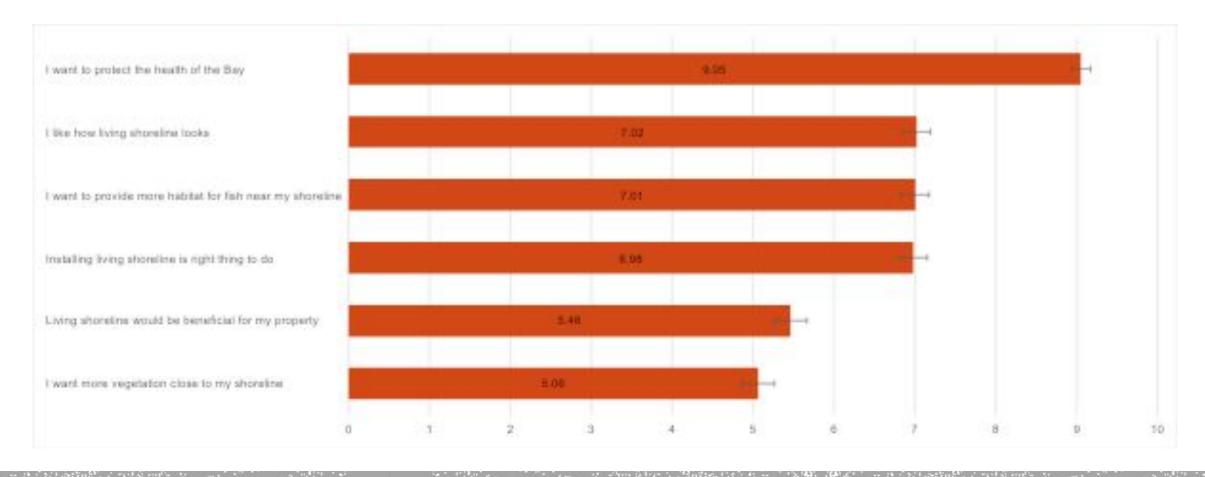
SURVEY OF SHORELINE PROPERTY OWNERS

- What did we want to find out?
 - Prioritize behaviors related to living shorelines for additional research.
 - Prioritize behavior, "install buffer (upland/riparian) vegetation" for additional research.
 - Prioritize behavior, "leaving an unarmored shoreline alone" for additional research.
 - Remove the suite of armor-related behaviors and beach nourishment from the list.
 - Promoted six behaviors for additional research.





RANKED BARRIERS TO INSTALLIN G A LIVING SHORELINE



RANKED BENEFITS TO INSTALLING A LIVING SHORELINE



natural shoreline to help protect health of the Bay nt to go through a permitting process ion control projects is too expensive shoreline does not need much care ugh erosion control rosion control shoreline project is too complicated

BARRIERS AND BENEFITS TO LEAVING SHORELINE UNARMORE

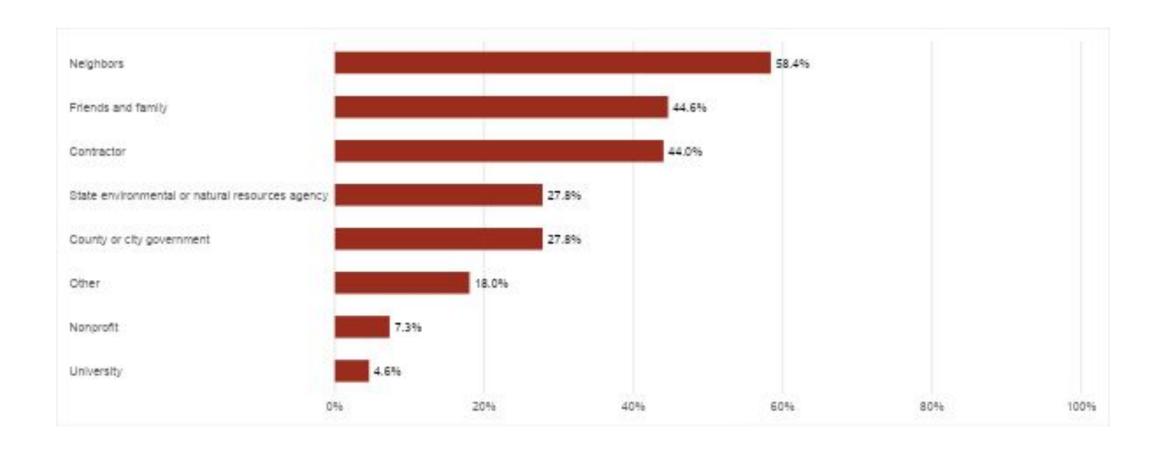




THE IMPLEMENTATIO N PLAN

- Outreach guidance packaged as a set of tools.
- Organized by who is conducting the outreach.
 - Individual (e.g., community ambassador)
 - Community or watershed organization
 - State government agency.
- Tools include:
 - Commitments
 - Education
 - Personal Contact
 - Social diffusion
 - Testimonials
- Note: Education alone is not likely to influence adoption of complex behaviors. The Implementation Plan includes an explanation as to the WHY for the use of social science tools.



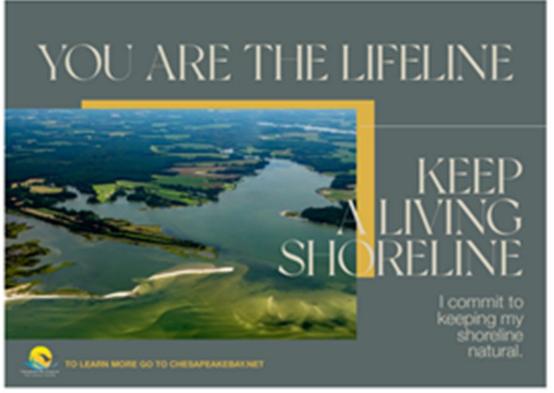


INFORMATION SOURCES FOR SHORELINE MANAGEMENT



Tool and Resources	Community Organizations	Community Ambassadors	Government Agencies
Channels			-
Local Publications	Х		
Social Media Posts	X		
Demonstration Site Events	X		
Public Events	Х		
Materials			
Commitment Card	Х	Х	
Poster, You are the Lifeline	X	Х	
Shoreline Sign	Х	Х	
Video, Living Shorelines (7 minutes)	Х	х	x
Documents			
Academic, Agencies, and NGOs (List)	Х	х	х
Case Studies	Х	Х	Х
Contractors (List)	Х	Х	Х
Contractor Questions	Х	Х	Х
Event Planning Guide (Demonstration Site)	Х		
Event Planning Guide (Public)	Х		
Funding Resources (List)	Х	Х	Х
Living Shorelines v. Bulkhead	Х	Х	Х
Native Plant Resources (List)	Х	Х	Х
Permit Process Flyer	Х	Х	Х
Talking Points	Х	Х	Х
Resources			
Resource Spreadsheet	Х	Х	Х
CBP Campaigns Website Landing Page	×	×	Х

MATERIALS AND TOOLS BY OUTREACH GROUP





The Chesapeake Bay is my Community. I commit:

- To not removing natural vegetation on my property.
- To explore options on how to plant natural vegetation.
- To create a better habitat for wildlife.
- To protect the health of the Bay.



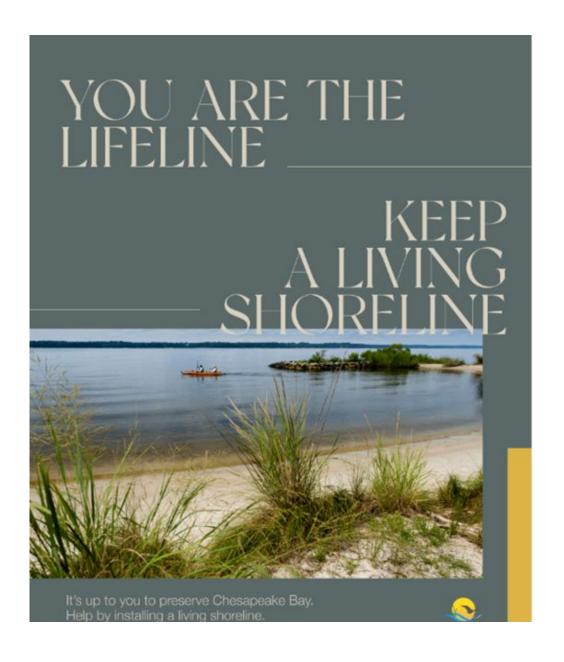
Inspire others to become guardians of the Bay by protecting our shorelines.

SIGN HERE



COMMITMENT CARD

- Property owner signs the card to show their commitment to keeping their shoreline natural.
- Should clearly show property owner's name.
- Powerful social science tools, especially when displayed publicly.
- Best displayed in public spaces, such as parks or on trail heads.
- Signatures should be collected at public meetings and events.
- Could be from a neighborhood, town or other familiar region.
- Recommended to display with program poster.



POSTER

- To be placed in public spaces, such as business windows, restaurants, marinas, community rooms and kiosks at trail heads.
- Display at demonstration sites and public events and exhibits.



LIVING SHORELINE CASE STUDY

CAPE SAINT CLAIRE COMMUNITY LIVING SHORELINE | MARYLAND

RESEARCH TO RESILIENCE

By conducting thorough research, the Cape Saint Claire Community was able to connect with experts and design a living shoreline that best fit their community needs.

The Cape Saint Claire community is a long-standing neighborhood in Anne Arundel County, Maryland. The community, which was originally established as a summer retreat, now boasts around 2,300 homes and 8,000 residents. Cape Saint Claire features several marinas and beaches, and the beautiful shorelines remain a focal point for community gatherings. Residents enjoy swimming and fishing at their beaches, just steps away from their homes. However, over the years erosion has significantly reduced beach access. The Cape Saint Claire Improvement Association Beaches & Parks Chair, Beau, who grew up in "The Cape", remembers a time when residents could spread out along their vast beaches. Today certain parts of the beach are inaccessible, especially during high tide. Hurricane Isabel in 2003 further exacerbated issues with erosion. The Maryland Department of Natural Resources (DNR) confirmed the concerns about erosion, projecting up to three-foot annual loss of the beach.

In 2007, the Cape Saint Claire Improvement Association (CSCIA), a board of volunteer residents, spearheaded an initiative to protect their community beaches. After initially expioring living shorelines, the project was put on hold due to the 2008 financial crisis. The community was finally able to pursue a living shoreline project in 2013. The first phase of the project included assessments of several waterfront sites throughout the community conducted by the Maryland Department of Natural Resources (DNR). Next, the CSCIA selected consultants to not only assist with the permitting and designing of their expansive living



shoreline, but also, and perhaps most importantly, one who agreed to hold public meetings for the residents. The CSCIA was committed to making sure the large number of residents in Cape Saint Claire were informed about the living shoreline project, which required extensive coordination between the consultant and the CSCIA. Overall, community members were supportive of the living shoreline project to protect their beloved beaches.

The consultant was able utilize previous projections of erosion conducted by DNR, as well as an assessment of community properties to update their restoration priorities. The consultant provided the CSCIA with expectations for installation and potential costs. Eventually, the CSCIA decided to pursue the construction of living shorelines along their main beach and a lake site. The two sites provide more than 1,000 linear feet of waterfront, an ambitious project in both size and scope that would require community fundraising and support from grants.



CASE STUDIES

- Six case studies that discuss the experiences of property owners in installing living shorelines.
- Each contains before and after photos.
- Three from Maryland, three from Virginia.
- Document different scenarios and reasons for installing a living shoreline.
- Can address the concerns of others who are currently in different stages of the decision-making process.



CHESAPEAKE BAY LIVING SHORELINE GIJARI)AN OF THE BAY.

To learn more go to ChesapeakeBehaviorChange.org/Campaigns



SHORELINE SIGN

- Promote living shorelines through social networks.
- Provides an opportunity to facilitate conversations between neighbors or from the water.



OTHER PROGRAM MATERIALS

Material/Tool	What is it?
Academic, Agencies and NGOs List	List of links to living shorelines resources provided by these entities.
Contractors	List of contractors in DE, MD and VA who have expertise in living shorelines.
Contractor Questions	List of questions for property owners to ask of prospective contractors.
Event Planning Guide (Demonstration Site)	Four documents that contain details for planning a demonstration event.
Event Planning Guide (Public)	Four documents that contain details for planning and implementing a public event.
Funding Resources	Three documents (one each for DE, MD and VA) that provides information about available funding assistance
Living Shorelines vs. Bulkheads	Fact sheet with science-backed information and graphics as to why living shorelines are more resilient than hardened structures.



OTHER PROGRAM MATERIALS—CNT'D

Material/Tool	What is it?
Native Plant Resources	List of native plant resources by state (DE, MD, VA), that contain links to native plant societies and nurseries.
Permit Process	Fact sheet distilling the permitting process down into five basic steps.
Talking Points	Talking points to facilitate conversations between community ambassadors and property owners around the benefits of keeping a shoreline natural and installing a living shoreline.
Resource Spreadsheet	Excel spreadsheet with 12 tabs containing information on: Organization Facebook pages, local Facebook pages, NextDoor groups, community newsletters, public event spaces, counties bordering the Bay, demonstration sites, general resources, educational organizations, trainings and workshops, other programs and other campaigns.
Video	Seven-minute video covering an overview of living shorelines, including their benefits and where to find more information and installation support.

QUESTIONS?

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All program materials can be found at www.chesapeakebehaviorchange.com/campaigns

