

HB 602

Environment – State Wetlands – Shoreline Restoration



CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

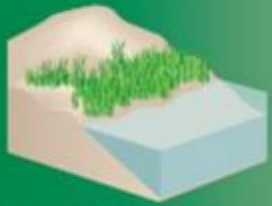
WHAT DOES HB 602 DO?

- Clarifies and expands existing state law preferencing Living Shorelines for erosion control
- Clarifies and narrows the waiver process
- Directs MDE and DNR to partner to identify Priority Shoreline Restoration Zones
- Creates a special account to be used to provide grants to replace armored shorelines with Living Shorelines

GREEN - SOFTER TECHNIQUES

GRAY - HARDER TECHNIQUES

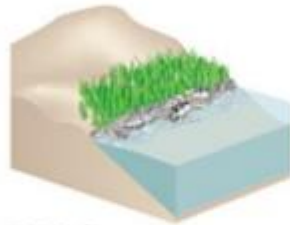
Living Shorelines



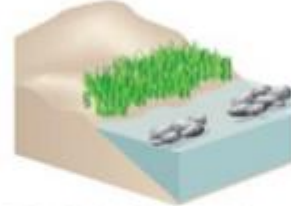
VEGETATION ONLY -
Provides a buffer to upland areas and breaks small waves. Suitable for low wave energy environments.



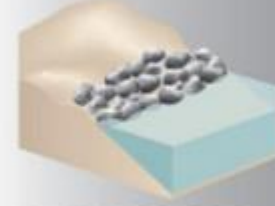
EDGING -
Added structure holds the toe of existing or vegetated slope in place. Suitable for most areas except high wave energy environments.



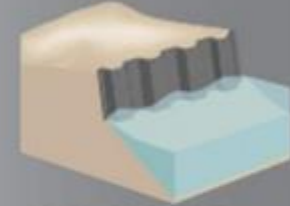
SILLS -
Parallel to vegetated shoreline, reduces wave energy, and prevents erosion. Suitable for most areas except high wave energy environments.



BREAKWATER -
(vegetation optional) - Offshore structures intended to break waves, reducing the force of wave action, and encourage sediment accretion. Suitable for most areas.



REVETMENT -
Lays over the slope of the shoreline and protects it from erosion and waves. Suitable for sites with existing hardened shoreline structures.



BULKHEAD -
Vertical wall parallel to the shoreline intended to hold soil in place. Suitable for high energy settings and sites with existing hard shoreline structures.

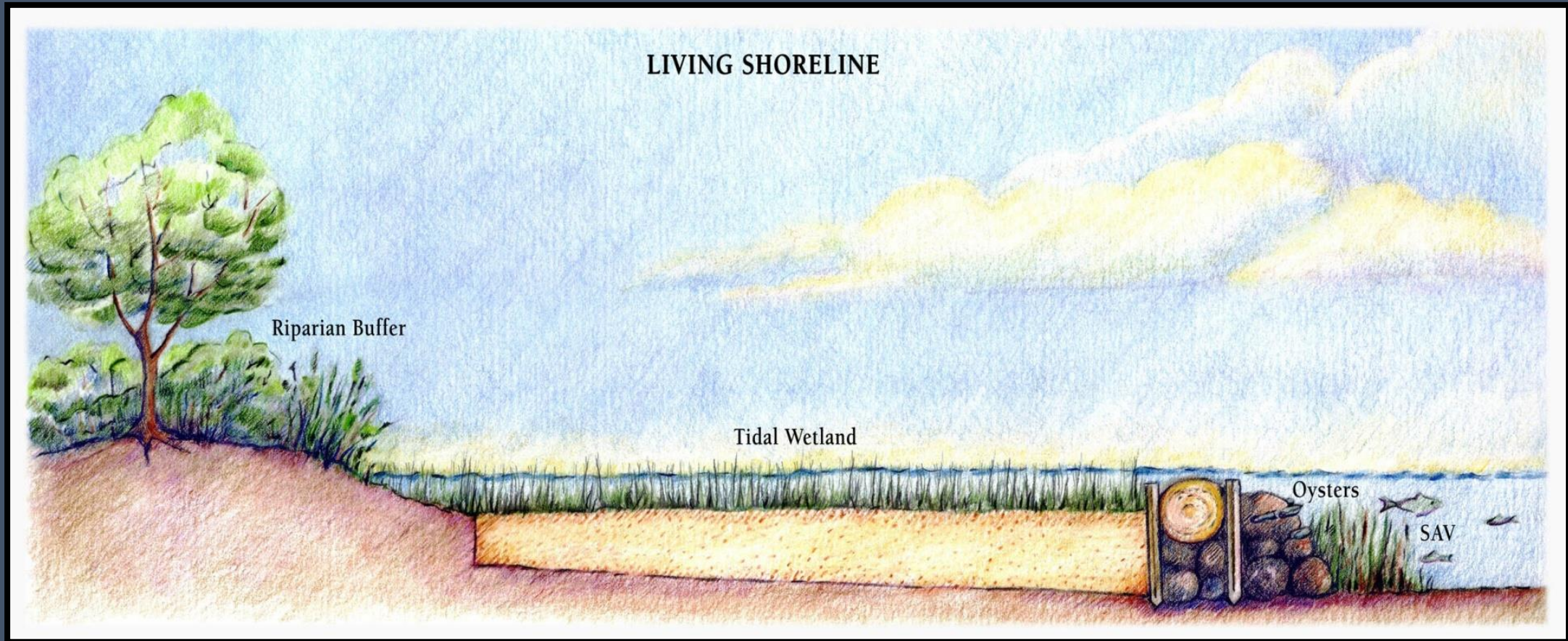
Potential Components of a Living Shoreline Restoration Project

Riparian Buffer

Tidal Wetlands

Oysters

SAV's



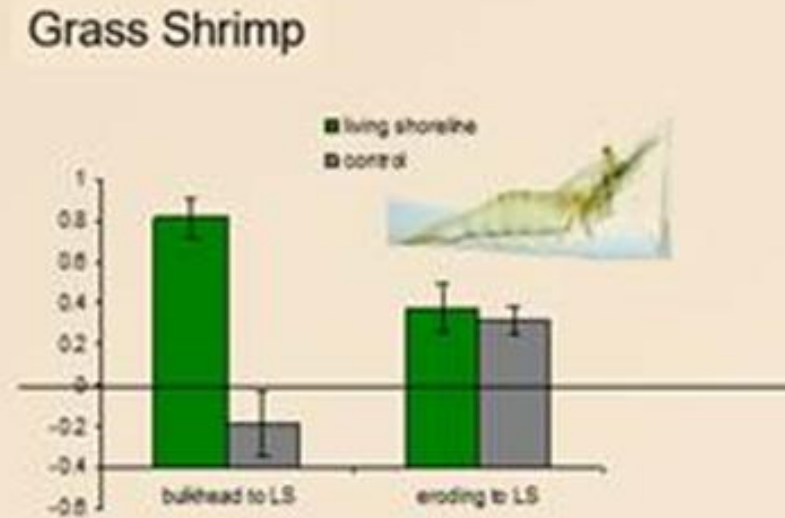
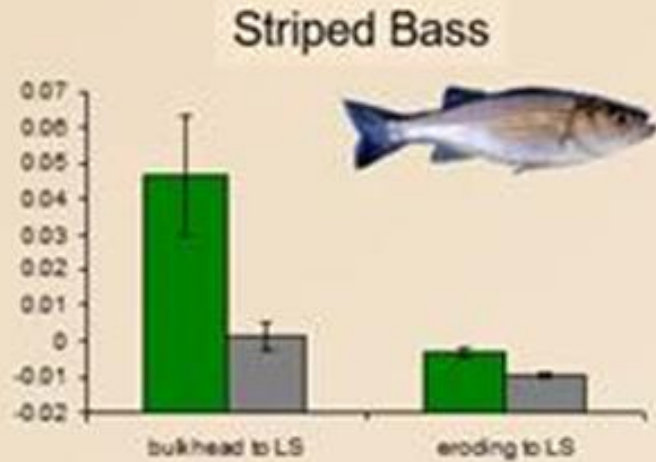
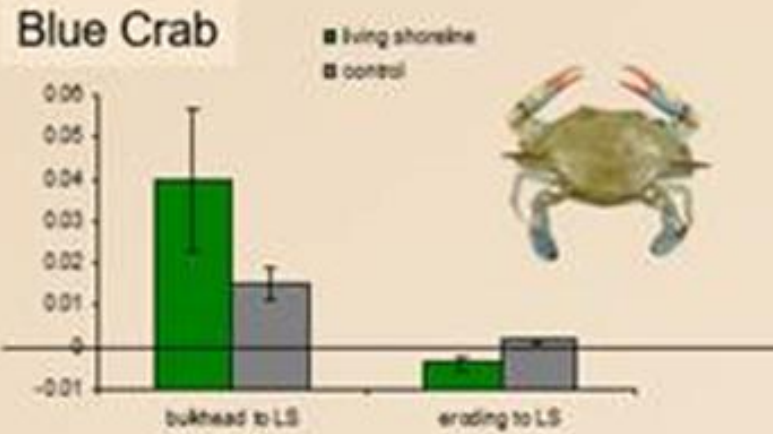
Provide Erosion Control, Water Quality Filter, Fish & Wildlife Habitat

Shoreline Hardening Remains Prevalent in Maryland

County	Hardened Shoreline (miles)	Total Shoreline Length (miles)	Percent Hardened
Anne Arundel	234.72	537.08	43.70%
Baltimore	97.07	257.76	37.66%
Calvert	49.71	288.43	17.23%
Cecil	<i>unknown</i>		
Charles	31.74	302.79	10.48%
City of Baltimore	47.29	63.14	74.90%
Dorchester	101.28	1650.01	6.14%
Harford	<i>unknown</i>		
Kent	36.20	359.43	10.07%
Queen Anne's	101.73	433.08	23.49%
Somerset	31.35	1284.26	2.44%
St. Mary's	108.78	485.06	22.43%
Talbot	195.41	756.99	25.81%
Wicomico	19.40	392.88	4.94%
Worcester	1.67	84.68	17.95%
TOTAL	1056.33	6895.58	15.32%

Ecological: several nekton species increased at LS; none decreased

After-Before (change in density; #/sq m)



Case Study – St. John’s College, Annapolis

Before



After

