

2020 Living Shorelines Amendment: Briefing Materials

Why Protect Wetlands? Wetlands provide free valuable services:

- Existing State Law states that wetlands provide:
 - Habitat for marine and inland wildlife, waterfowl, finfish, shellfish
 - Water quality improvement by removal of nutrients and sediment
 - Tidal erosion protection
 - Buffer against coast flooding and storms
 - Recreational and aesthetic enjoyment for the promotion of tourism, navigation and commerce
- Virginia commitment to No Net Loss, Net Resource Gain

Are Wetlands at Risk?

- Significant historic losses to dredge and fill from development
- Continued and projected losses from coastal development and shoreline management
- Virginia stands to lose 167 square miles of wetlands over the next 30 years due to sea level rise. Wetland persistence in the face of sea level rise will be limited by development and elevation.

How Living Shorelines Work? Living shorelines use marsh plants, alone or more commonly with other natural materials, to mimic natural tidal marshes in providing erosion control, water quality and habitat services. Created marsh can off-set marsh loss.

Where are Living Shorelines Suitable? Upwards of 70% of Virginia shoreline may be suitable for living shorelines (planted marsh or beach alone, or with an offshore structure). Living shorelines will not work in all situations with application limited by: physical constraints (high wave energy, high banks, and deep nearshore waters), landuse (construction access, infrastructure proximity), use conflicts with navigation and natural or historic resources.

What are the Current Permit Practices? Numbers from the past eight years (2011-2018) show cumulative shoreline permits for 150 miles of shoreline.

- Living shorelines suitable along at least 102 miles (68%)
- Living shorelines used on only 33 miles (22%)

How to Determine Suitability? VIMS/ CCRM decision tools provide guidance for shoreline management based on the Virginia policy of living shorelines as the preferred erosion control approach.

- The Shoreline Management Model (SMM) is a GIS model that applies decision logic to predict the best management practices for a shoreline and where living shorelines are suitable. The model is available for all of Tidewater Virginia and is currently being applied in other coastal states (Maryland, Florida, Alabama, and Texas).

Other State Efforts Other coastal states and regions have or are looking to implement living shorelines policies including Maryland, Delaware, North Carolina, Florida, New Jersey and there is a federal bill in the current Congress (**H.R.3115 - Living Shorelines Act of 2019**).