

StormSmart Properties Comparison Chart - Relative Costs of Shoreline Stabilization Options

With shoreline stabilization projects, there are typically a range of options available that give increasing levels of protection with increased costs. In addition, whenever you hire a professional to conduct work on your property, total costs are expected to vary significantly based on site-specific considerations. These considerations include the severity of erosion, condition of the existing site (e.g., proximity of the eroded area to the high tide line), exposure to wind and waves, frequency of storm events, proximity to endangered or threatened species habitat, and complexity of project design and permitting. The following table provides relative costs for permitting, construction, maintenance, and mitigation for various shoreline stabilization techniques to reduce erosion, flooding, and storm damage.

Technique	Relative Costs				
	Design and Permitting	Construction	Expected Maintenance Frequency ¹	Average Annual Maintenance Costs ²	Average Annual Mitigation Costs ³
Artificial Dunes & Dune Nourishment	Low	Low	1-5 years	Low	None
Controlling Overland Runoff	Low	Low	5-20 years	Low	None
Planting Vegetation	Low	Low	1-3 years	Low	None
Bioengineering - Coir Rolls on Coastal Banks	Low-Medium	Medium-High	1-3 years	Low-Medium	Low
Bioengineering - Natural Fiber Blankets on Coastal Banks	Low	Low	1-3 years	Low	None
Sand Fencing	Low	Low	3-5 years	Low	None
Beach Nourishment	Medium	Low-Medium	5-10 years	Low	Low
Rock Revetments - Toe Protection	High	High	10-20 years	Low	Low- Medium
Rock Revetments - Full Height (up to predicted flood zone elevation)	Very High	Very High	20-25 years	Low	Medium
Seawall	High-Very High	Very High	25-40 years	Low	Medium-High

COST ESTIMATES (average cost per linear foot of shoreline)

Low: <\$200

Medium: \$200-500

High: >\$500-1,000

Very High: >\$1,000

¹The frequency of required maintenance is highly dependent on storm severity and frequency and shoreline exposure. See StormSmart Properties fact sheets for details on maximizing longevity.

²Estimated, annual costs averaged over the life of the project to maintain project components, assuming the project is designed and installed properly.

³Estimated, annual costs averaged over the life of the project to compensate for the technique's adverse effects.