

Combination Methods

You can use erosion control measures in various combinations, either to complement each other or to accomplish together what a single measure might not do alone.

Beach fill and vegetation are two measures that are most effective when used with other protective devices. Temporary groins or breakwaters of light materials (timber cribs filled with brush, for example) can provide enough protection to allow vegetation to become established. Vegetation alone cannot protect against heavy wave action, nor can it maintain the face of a steep bluff threatened by groundwater seepage: structural methods are also needed in these cases. Like native beaches, filled beaches are subject to rapid erosion and are therefore often used in combination with sills, groin fields, and breakwaters.

Other measures can be combined also. For instance, breakwaters and bulkheads may work together to protect a bluff while minimizing erosion of the beach. Combinations are not limited in the number of methods that can be used together. Rather, they depend on the nature and extent of protection desired. In an extreme case, a single site might benefit from a perched beach and a revetment and drainage system to protect the bluff.

As in the case of single devices, careful evaluation is always required to identify the most appropriate combinations of erosion control measures for a given site.

Other Alternatives

The erosion control measures outlined here have been mainly concerned with protection of the shoreline, to allow continued recreation opportunities and defend manmade structures along our coasts. As well as using positive erosion control measures, however, you might consider making shorefront homes, docks, and other structures more resistant to damage. Bracing and reinforcement may be appropriate, sometimes in combination with relocation or elevation of the structure.

In thinking about relocating a house or other shoreline structure, you should consider whether the rate of erosion has been slow and steady for long periods of time (over twenty-five years), or if most of the erosion has occurred during shorter periods of time in severe storms. If the erosion is at a fairly constant rate, moving the house may add several years to its useful life. If the erosion is more unpredictable, moving the house is less advisable. The practicality of moving a house also depends on the availability of inshore sites and on the expense of moving, compared with simply building a new house on a site farther inland.

Structures may be reinforced, extended, or relocated as an alternative to positive erosion control measures, or in addition to them. Professional advice can help to clarify the choices to be made and the costs of the various options. In some cases, the expense far outweighs the value of the expected benefits, and sale of the property may be the wisest choice. A property that no longer suits one owner's needs may be ideal for another whose interests or resources are different.



Vegetation protected by sand fences