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SOFT SHORE STABILIZATION

NATURE'S ALTERNATIVE TO BULKHEADS

Erosion is a common concern among shoreline Landowners and many turn to armoring as a solution. Often erosion is caused by upland drainage and not wave action. No type of shore defense is effective in this case. If shore defense is necessary, soft shore stabilization is preferred.



Artist's rendering of a soft shore restoration project in Jefferson County depicting before (inset) and after restoration.

What is the difference between structural shoreline armoring and soft shore stabilization?

Structural shoreline armoring includes traditionally engineered erosion control systems such as bulkheads, seawalls, and similar hard structures built of riprap, concrete, steel or aluminum sheet piling, and creosote wood pilings.

Soft shore stabilization mimics natural processes and creates living shoreline erosion control through bioengineering, beach enhancement, and vegetation planting.

What is the problem with bulkheads and shoreline armoring?

Bulkheads and shoreline armoring starve beaches of bluff sediment sources, disrupt the balance of erosion and deposition of sand and are costly to install and maintain. In addition they may cause:

- Increased wave energy and potential for bulkhead failure
- Increased erosion of neighboring beaches and bluffs
- Increased risk of landslides and property damage
- Loss of native plants and upland habitats
- Scoured intertidal shellfish habitat
- Steepened coarse beaches unsuitable for forage fish and juvenile salmon.

What are the benefits of soft shore stabilization?

Soft shore stabilization allows bluffs to feed beaches, restores the balance of sediment movement and is less costly to install and maintain. It also provides:

- Wave energy absorption by driftwood, dune grass, and other intertidal plants
- Increased beach resilience to storm waves, storm surge, and flooding
- Filtration of polluted stormwater runoff
- Improved beach access for wading, fishing, and walking
- Increased opportunity for wildlife observation
- Enhanced nearshore and marine habitats that support healthy shellfish, forage fish and salmon populations



NORTHWEST STRAITS
marine conservation initiative

