

PROTECT YOUR PROPERTY, PROTECT OUR SOUND



There are ways to shore up your property that are natural and effective. Often, leaving the natural beach in place is the best course of action. When that isn't enough, soft shore options can stabilize your shore and safeguard the Sound.



Beach



Bluff



Low Bank Shores

Shore Type

How the Shore Works

- High winds produce high waves. When high waves hit the beach, it causes erosion
- A gravel berm, native plants, and drift logs help dissipate wave energy and reduce erosion
- More natural shorelines allow the ebb and flow of sand and gravel, which keeps the beach healthy and protected

- Water saturates the top of the bluff
- Winds and waves hit the bottom of the bluff
- Certain soils, better drainage, and native plants help hold the land together

What Can I Do?

- Leave native trees and vegetation
- Add native plants, including trees and shrubs
- Remove invasive species that threaten native shrubs and trees
- Plant dune grass to stabilize beach
- Place logs on the beach to diffuse wave energy and help build sediment
- When building stairs and trails, allow for natural processes. Don't run them straight to the beach
- Place sand and rounded gravel on the beach to build it back up, slow erosion, and add storm protection
- Maintain existing drainage
- Consider moving your home vertically and/or landward – larger setback distances can increase safety and help your home last longer

- Leave native trees and vegetation
- Add native plants, including trees and shrubs
- Remove invasive species that threaten native shrubs and trees
- Maintain existing drainage
- Improve drainage -- reduce impervious surfaces, use rain barrels, or install a drainage system
- When building, do it in a way that doesn't channel runoff in concentrated areas
- Reslope the bluff and add stabilizing plants
- Consider moving your home landward – larger setback distances can increase safety and help your home last longer

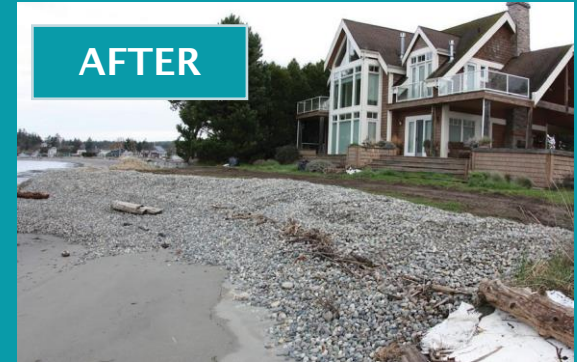
How Can I Do It?

Soft Shore Protection Project

BEFORE



AFTER



Consider Soft Shore Options for your property. For more information, visit Northwest Straits Foundation's webpage at www.nwstraitsfoundation.org/project_cat/shoreline-landowner-program/. Every shoreline situation is unique. While the strategies mentioned here may work on your property, you should seek professional advice and be sure to apply for the appropriate permits. Contact the Northwest Straits Foundation (360-733-1725) to address questions specific to your property, and to sign up for a site visit to assess your property.

Hard Armor



Hard armor is currently used on a wide variety of properties. Once thought to be a good alternative for protecting your home, we now know that hard armor may not be as effective as originally thought. It may also have unintended consequences for nearby shoreline and marine habitats.

What if I Already Have Hard Armor?

If your property has a bulkhead, seawall, or other hard armor, that armor will eventually need to be repaired or replaced. When that time does come, consult with a professional to see if any of these soft shore alternatives will work for you:

- Remove your hard armor
- Add native plants
- Consider relocating structures further from the shore
- Place logs on the beach to diffuse wave energy and help build sediment
- Reslope the bluff and add stabilizing plants
- Place sand and rounded gravel on the beach to build it back up, slow erosion, and add storm protection

Next Steps

Explore your soft shore options. For more information, visit

www.nwstraitsfoundation.org/project_cat/shoreline-landowner-program/



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HARD FACTS ABOUT SOFT SHORE

One size doesn't fit all

There are circumstances when hard armoring of a shoreline might be appropriate. However, in most situations, using soft shore techniques can preserve or mimic natural shoreline characteristics while effectively protecting property.

Protecting wildlife

Bulkheads can have a detrimental effect on the cycle of life as well. They can alter or eliminate upper beach areas used by some small fish to lay their eggs...which can result in fewer small fish for larger fish to eat...which can result in a reduced food supply for both orcas and humans.

Resilience to climate change impacts

Impacts from climate change include rising sea level, increased frequency of storm events and increased storm surge. Hard armoring increases risk of damage to properties caused by these climate change impacts and also prevents the natural shoreline sediment process. For a more resilient shoreline, consider natural beach or soft shore alternatives.

Low cost, long life

The average cost for a hard armor installation is between \$50,000 and \$60,000 per 100-foot piece of shoreline, while a soft shore installation runs in the neighborhood of \$25-30,000. And once installed, you can expect a soft shore option to protect your shoreline for a long time to come (only 4% of soft shore installations since 1990 have required maintenance of any type).

The simpler the better

Projects that are over-designed for a particular site can negatively impact the beach environment with no added protection for the landowner, and oftentimes unnecessarily at a higher cost. Just allowing the shoreline to function naturally, or with minor enhancements, will protect your property.

Attractive beaches add value

Many potential buyers of waterfront property envision family and friends playing or relaxing on their beach—an activity that may prove impossible or even unsafe when obstructed by a bulkhead. Natural-looking shorelines typically encourage waterfront activities, can make a home look more appealing and cost less to maintain.