Steps to Consider when Developing your Coastal Property

1. Get a professional site assessment to determine the best methods for protecting your property.
2. Select design techniques best suited to your property.
3. Visit qathet.ca/development-resources/ for more resources on developing your coastal property.
4. Attend a workshop, access online resources, or learn more about becoming Green Shores certified at stewardshipcentrebc.ca
5. If you plan on doing any works in the foreshore area, contact FrontCounterBC to obtain a permit.

For more information, please contact us!

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Developing Properties in

Coastal Areas

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Protecting Coastal Properties and Ecosystems

Coastal areas are one of the most productive ecological zones on earth, providing vital habitat for many plant, bird, fish, amphibian, and animal species.

Coastal properties are desirable places to live and recreate. Yet these properties may be vulnerable to the risk of coastal flooding and erosion due to physical forces such as wind, waves, sediment movements, and changing water levels.

Traditionally, ***hard structures*** such as rock riprap, concrete blocks and sea walls have been used to protect shorelines from these risks. However, we now know that hard structures disrupt sediment movements, increase erosion potential on adjacent properties, and negatively impact coastal habitats.

Soft protection measures are nature-based alternatives to hard structures that restore physical processes, reduce flooding and erosion, and enhance habitat for fish and wildlife. They are also typically less expensive and less complex to implement.

A broad spectrum of soft design techniques can be applied to protect your property and manage the shoreline sustainably for you and future generations.

Content Source: Washington Department of Fish and Wildlife. (2016). Your Marine Waterfront (Canadian Edition). Published by the Stewardship Centre for British Columbia.

Design Techniques

Leaving your site to function naturally is likely the best course of action for environmental health. However, if intervention is needed, soft design techniques are best management practices that should be considered first.

Vegetation
Native vegetation is exceptional in its ability to hold soils together, stabilize slopes, and absorb and filter rainwater. Lawns are less suited for providing these benefits. Adding and maintaining vegetation is a good idea on any site.

Drainage
Redirecting rainwater through drains or pipes to the bottom of the bluff can protect your bluff or bank from rainwater-induced erosion. This technique is typically used where there is evidence of surface erosion or risk of landslide.

Building Location
When a structure is threatened by erosion or flooding, sometimes the most effective solution is to place it out of harm's way. This may mean locating a building farther from the shoreline or above a certain elevation to protect against erosion and flooding.

Log Placement
This technique places large logs and woody debris along the upper beach to mimic natural driftwood accumulation. Logs disperse wave energy, trap and build up sand, and provide habitat and food sources for plants, animals, insects, and other shoreline species.

Beach Nourishment
Nourishment involves placing sand and rounded gravel on the beach to re-establish backshore areas or create protective storm berms. Beach nourishment slows beach erosion, provides wind and storm protection, mimics beneficial natural processes, and is relatively inexpensive. Beach nourishment is a good option where buildings are at risk because beaches have eroded away.

Reslope and Revegetation
Resloping stabilizes bluffs and banks, while revegetation protects the slope from erosion and enhances aesthetics, water quality, and wildlife habitat. This approach is most often used in response to an upper slope disturbance that has created steep, unstable slopes

Structure Installation
Hard structures are considered an option of last resort and are most often only built where required by site conditions. If a hard structure is determined to be necessary, following proper design protocols is critical for minimizing negative impacts to beach habitat and neighbouring properties.

Structure Removal
If your existing hard structure is in need of repair or replacement, it is a good time to consider structure removal. It may reduce costs, improve beach access, and benefit you and the environment.

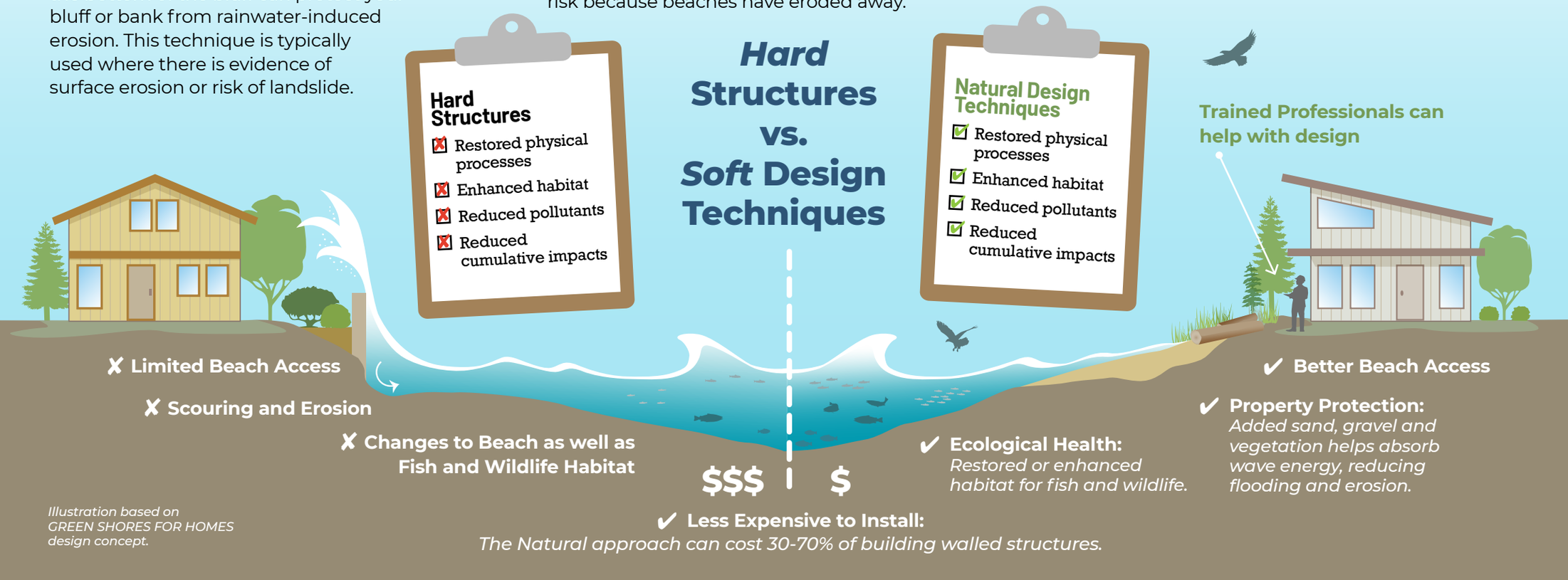

Illustration based on GREEN SHORES FOR HOMES design concept.