

# Residential Erosion Concerns

Improperly managed stormwater often results in runoff, soil erosion, and nutrient and pollutant transport. Eroded sediments and pollutants enter our bays, causing harm to valuable coastal resources, such as coral reefs and fish habitat. We all want to help protect fish habitat, right?!

- ✗ **Stormwater Runoff**  
Pavement and roofs are impermeable surfaces that create stormwater runoff and can cause flooding.
- ✗ **Erosion**  
Clearing land of trees and bush exposes soil which erodes and washes downhill during rain events.
- ✗ **Nutrient and Pollutant Transport**  
Runoff can carry nutrients and pollutants down driveways, roads, and ghuts into the ocean.

# Top 2 Drainage Tips for Homeowners

These two steps to improve drainage are cost effective and often solve simple drainage and erosion issues:

- 1 Check Gutters and Downspouts**  
Make sure that all rain water is going into your cistern! Soggy or eroded areas near the foundation of your home can indicate that your gutters are clogged, pitched incorrectly, or undersized.
- 2 Grade Soil Away From House**  
Soil should be higher at the foundation and slope away the first six feet. A good rule of thumb is a one-inch drop over each foot.

# More Drainage Tips for Homeowners

- ✓ **Determine the Source**  
Surface water may be entering your property from the road, rooftops, driveways, and even a neighbor's property. Determine the source of the water to find the best drainage solution.
- ✓ **Start at the Top**  
Address surface water at the highest possible point on your property. Fix the problem before the location of the erosion and deal with lower volumes of water.
- ✓ **Slow Water Down**  
As water moves downhill, it picks up force and speed, causing erosion. If possible, slow it down by directing it across a hillside, instead of straight downhill, or using check dams, small walls built into trenches or swales to cause water to pool in one section of the swale, and then overflow into the next. Plant native wetland plants in these swales to create a bioswale.
- ✓ **Spread Water Out**  
When water is directed to one area, erosion is much more likely to occur. Spread water out to reduce the energy behind the flow. One way to do this is to use level spreaders. Level spreaders are perforated pipes set across a hillside. Water is released along the length of the pipe, instead of in one location.
- ✓ **Let Water Sink In**  
Install a rain garden with native plants to beautify an area and help water infiltrate.
- ✓ **Use Native Plants to Absorb Water**  
Install native plants on hillsides to reduce runoff. Use erosion control matting when planting on steep slopes.

# About Us

The Virgin Islands Conservation Society promotes the conservation and restoration of island ecosystems, sustainable development of islands, and awareness of conservation issues.

VI Clean Coasts is a collaboration between the Virgin Islands Department of Planning & Natural Resources, Division of Coastal Zone Management and the Virgin Islands Conservation Society. It's goal is to help the Virgin Islands become more eco-friendly through seed grants and educational programs customized for businesses and residents.

VIRGIN ISLANDS CONSERVATION SOCIETY  
AND VI CLEAN COASTS PRESENT THE:

# RESIDENTIAL EROSION CONTROL INITIATIVE

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## Contact Us

For more information, please visit:

[www.viconservationsociety.org/programs/vi-clean-coasts](http://www.viconservationsociety.org/programs/vi-clean-coasts)

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## Why should we protect our coasts?

Our coastlines in the Virgin Islands provide a vital role in protecting residents from high winds and storm surges during hurricane events. Our economy depends on beautiful beaches and clean swimming water for residents and visitors alike. The coastlines also provide vital habitat for plants and wildlife. Protecting these spaces from the damaging impacts of runoff, erosion, nutrients, and pollution are vital in preserving our environment.