**“Save the Beach.”**

**NEGRIL, Jamaica** (Achieve3000, November 13, 2014).

Tourists from around the world are drawn to a stretch of beautiful palm-fringed shoreline known as "Seven Mile Beach," a [crescent](https://portal.achieve3000.com/kb/lesson/?lid=16289&step=19&c=1&asn=) of white sand along the turquoise waters of Jamaica's western coast, in the village of Negril. But the sands are slipping away, and Jamaicans fear that the beach will someday need a new nickname.

Each morning, groundskeepers carefully tend Negril's resort-lined shore. Some sections, however, are barely wide enough for a decent-sized beach towel. Officials at the Jamaican National Environment and Planning Agency say that sand is receding at a rate of more than 1.1 yards (1 meter) a year.

"The beach could be totally lost within 30 years," said Anthony McKenzie, a senior director at the agency.

Shrinking coastline has long been a source of worry for the area. It could impact Negril's environmental and economic future. Many expect the erosion to worsen as a result of climate change, causing a hint of panic to creep through this laid-back village. It's one of the top destinations in a country where a quarter of all jobs depend on tourism.

"If the water takes over this beach…that's the end of the tourists," said resident Lyn Dennison, as she tended to her beachside jewelry stand.

For much of its history, Negril was a small, isolated fishing outpost. In the late 1960s, it began to draw tourists who were lured by the scenery. As Negril's fame grew, resorts such as Sandals and the Grand Lido went up. The number of annual visitors grew from about 40,000 in 1980 to more than 400,000 in 2012.

Fearful of losing their main draw due to erosion, some hotels have been pressing the government to refill the beach with dredged sand. But it's a pricey step that many experts consider a temporary fix at best.

Jamaica is taking other actions. It's readying plans to build submerged breakwaters. These are man-made boulders set in place to reduce wave strength. The government hopes the breakwaters will absorb wave energy and slow the loss of shoreline. The project could cost as much as $77 million over the course of 80 years.

What's happening in Jamaica offers a glimpse of what may lie ahead for other coastal communities. Caribbean islands will be faced with the choice of trying to armor shores with seawalls and breakwaters or conducting a costly retreat from seas that are expected to continue to rise.

Beaches across the region are being transformed by a variety of factors: shoreline development, surges from increasingly intense storms, coastal pollution that affects marine life, and coral reefs crumbling in warmer waters. The changes are particularly worrisome for islands in the Caribbean because the area is highly dependent on tourism. In addition, roughly 70 percent of its people and much of its essential [infrastructure](https://portal.achieve3000.com/kb/lesson/?lid=16289&step=19&c=1&asn=) are situated along coasts.

The region is facing a threat to its very existence, said Ulrich Trotz, science advisor for the Caribbean Community Climate Change Center. The center provides policy advice and guidelines to more than a dozen member nations and territories.

"We don't have much time. Action now is [imperative](https://portal.achieve3000.com/kb/lesson/?lid=16289&step=19&c=1&asn=) if the Caribbean is to survive as we know it," Trotz said.

Building seawalls to protect land from the sea has been one response on the island of Barbados. But in many cases, scientists say that allowing shores to retreat or enhancing beaches with vegetation and restoring wetlands might be smarter.

"For many beaches…measures such as bringing in sand and creating seawalls will only slow the [inevitable](https://portal.achieve3000.com/kb/lesson/?lid=16289&step=19&c=1&asn=), and at a significant and continual financial cost," said Jason Spensley of the UN Climate Technology Center and Network.

Environmental experts and city planners say that leaders across the region need to adapt for the long term. City developers could adjust how they zone, improve enforcement of marine regulations, and better plan water systems, for example. Beachfront developers could be encouraged to protect dunes, use anchor vegetation such as sea grasses, better manage coastal runoff pollution, and push construction farther back from the coast.

"We just don't seem to be prepared to do any of it. It's as if we do not see what Negril has become [and] what the dangers to its future are," said Diana McCaulay, of the Jamaica Environment Trust.

But Shelia McDonald-Miller, program manager for Jamaica's breakwater project, disagrees. McDonald-Miller is confident that the offshore breakwater project will slow Negril's erosion. She is expecting construction to start in 2015.

Simon Mitchell, a geologist, is not so sure. Mitchell says that governments need to think further ahead. In low-lying Negril, for example, there is "no doubt" that hotels perched along the beach will be deluged in coming decades, he said.

"We need to be looking 50 years into the future," Mitchell said. "We can't keep going into places with [perfect] beaches, immediately put in hotels, and then end up with the same problem in 10 years' time because those beaches are eroding away."

The Associated Press contributed to this story.