

## Jetty & Groynes Restoration Project Example

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◀ The photos on this page were taken by the GM of the hotel Le Meridien in Martinique, 3 days after a hurricane struck. -- The jetties and groynes were almost completely destroyed.

This problem might not have been so severe had the coastal engineer not utilized the wrong size rock armour (boulders).

As well, the boulders had been improperly placed nor properly interlocked so as to increase the strength and longevity of the structure.



Jetty & Groyne Restoration Project Example, continued



◀ This photo shows the same area near the end of the reconstruction project. At this stage, new sand has been placed on the jetty.



◀ This, and the following, photo show the same area after the project completion; a final layer of sand and landscaping has been added. The effective placement of **groynes** can also be seen along the front edge of the jetty.

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A 240 foot long **seawall** was also built between the two jetties.

A layer of 14 oz. non-woven **geotextile fabric** was placed along the tops of the jetties after the boulders / core material had been position, to keep the beach sand from merging between the boulders.

4,500 metric tons of sand was then brought in to **re-nourish** the beaches.

A **sand grain size analysis** was performed beforehand so has to identify and replenish the existing shoreline with size-matched sand, thus *naturally* improving the existing beach.

