

Effects Of Beach Tourists On Bathing Water And Sand Quality At Puerto Velero, Colombia

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Abstract

Fragile coastal areas suffer from human activities. Environmental quality is one of the most important aspects in a tourist destination of sun and sand. The quality of bathing water and sand became indicators in the worldwide competition of beach destinations. We studied the water and sand quality along the beach of Puerto Velero, in northern Colombia. Water and sand beach quality were monitored during thirteen months. This allowed identifying the most significant sources of pollution along the beach, and understanding the interrelationship between tourism and the effects on the environment. Linear correlations allow assessing the association between the number of visitors and the physicochemical and microbiological parameters. The number of visitors was directly correlated with the presence of grease and oils, both in water and sand, as well as with fecal coliforms in water. A relation between the suspended solids and the presence of fecal coliforms in water and sand was observed. This statistical approach allows understanding the origin of beach sand and swimming water pollution at tourist beaches.

Keywords

Correlation Analysis; Puerto Velero Beach; Touristic Beaches; Water Quality.