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Effects of Porous Barriers on Coastal Wave Propagation S.P. SAMARAWICKRAMA, University of Moratuwa, H.J.S. FERNANDO, Arizona State University, S.S.L. HETTIARACHCHI, University of Moratuwa — Although corals and mangroves are believed to provide shoreline protection against waves, currents and storm surges, solid evidence for such through scientific studies is remarkably little and has been mostly accidental or circumstantial. Despite the obvious general buffering capacity, not much information available on how the removal of natural barriers effects the wave forcing on the shoreline, especially for the cases where the removal is confined to the local pockets with regulatory supervision. The paper presents the changes in velocities for the conditions of: (i) no structure, (ii) structure without an opening, (iii) structure with a narrow opening and (iv) structure with a wide opening. With the introduction of the structure there is a considerable reduction in velocities in the water column apart from the surface velocity.

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