

Effects of Coastal Structure Construction on Ecosystem

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Abstract : Coastal defense structures were built to protect part of shore from beach erosion and flooding by sea water. Effects of coastal defense structures can be negative or positive. Some of the effects are beneficial in socioeconomic aspect, but environment matters should be given more concerns because it can bring bad consequences to the earth landscape and make the ecosystem be unbalanced. This study concerns on the negative impacts as they are dominant. Coastal structures can extremely impact the shoreline configuration. Artificial structures can influence sediment transport, split the coastal space, etc. This can result in habitats loss and lead to noise and visual disturbance of birds. There are two types of coastal defense structures, hard coastal structure and soft coastal structure. Both coastal structures have their own impacts. The impacts are induced during the construction, maintaining, and operation of the structures.

Keywords : ecosystem, environmental impact, hard coastal structures, soft coastal structures

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