

## **Physical Impact of Sea Level Rise to the Coastal Zone Along the Eastcoast of Peninsular Malaysia**

### **ABSTRACT**

Sea level rise around the world caused by global warming since decade and effects on coastal especially country below mean sea level and country island. The prediction of sea level rise by 2100 is over 3m. Sea level rise increases caused by melting ice and thermal expansion. The impact of sea level rise concentrated along the coastal area. This paper studied the impact of sea level rise to physical parameters along the East Coast of Peninsular Malaysia. Seven physical variables such as geomorphology, shoreline change rate, coastal slope, lithology, maximum wave height, mean tidal range and sea level change were chosen to find an physical vulnerability index. The index also was mapped using ArcGIS software to picture the vulnerability. The worst area for physical vulnerability index is along the Pahang coastline especially Kuantan district. The prevention and adaptation from government and nongovernment agencies should be taken to reduce the effects of sea level rise.