

# Global warming will cause sea levels to go up <sup>[1]</sup>

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## Calificación:



Cited from Special for El Nuevo Día by Aurelio Mercado <sup>[2]</sup> Every day more evidence is showing that global warming is real threat; the world has had record high temperatures for more than a decade, the coastal lines are retreating, island nations are losing portions of habitable land and glaciers are melting. The latter is one of the factors causing the ascent of the sea level. The second factor is the thermal expansion of the ocean water. As the temperature of the ocean rises, the seas become less dense and they expand, occupying a greater surface of the planet. According to tides measurements, the 1960 to the 2000, in the Island of Magueyes in La Parguera, Lajas and La Puntilla the San Juan Bay, the sea level showed an increase of 0.05 inches (1.24 mm) and 0.06 inches (1.43 mm) per year, respectively. Although these numbers demonstrate that the elevation rate of the sea level varies geographically, is irrefutable that this happening. "For those who live in islands the consequences can be devastating. For many years it's been known that the sea level is rising, but in recent months that has accelerated. If the trend continues, and if we don't have any surprises, it is expected that by end of the century the sea level rises, globally, between 6 to 16 feet (2 to 5 meters)." Which could be the consequences? The melting of glaciers, the thermal expansion of the oceans and the coastal erosion could lead to "frequent coastal floods, intrusion of salt water into fresh water supplies, damage to agriculture, increased frequency of severe hurricanes and damages to the marine ecosystem. In addition, the economic and social impact would be devastating. "To understand the impact of the rise in the sea level, in the order of several millimeters per year well (that seems small in first instance), it is necessary to discuss the "law of Bruun ", proposed by the coasts engineer Per Bruun. This law says that in sandy coasts each millimeter of sea level increase carries with it an erosion of

between 100 and 500 millimeters of beach, as a result of the constant readjustment that the beach suffers due to that increase." "Therefore, if the predictions of a 6 to 12 feet increase in the sea level are correct, our beaches would retreat by a factor of 600 to 1,200 feet (183 to 366 meters) using the smaller factor of 100, or 3,000 to 6,000 feet (915 to 1,829 meters) using the factor of 500. And this is being conceited that other factors, like sand extraction or the dumping of rock and cement in the coast to try to "protect" coastal properties, that affect the coastal system do not exist.

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