

the water level was increased by 1.0 cm and the test program resumed with the same wave conditions. Following profile equilibration, it was found that the offshore profile had increased in elevation by 0.9 cm which Schwartz considered as confirmation of the Bruun Rule. Schwartz (1967) also conducted a second series of tests with slightly larger facilities, but following the same general experimental framework. Again good agreement with the Bruun Rule was reported. Field measurements were also carried out by Schwartz at Cape Cod, MA in which the shoreline response between spring and neap tides was evaluated in terms of the Bruun Rule. Although "a recognizable upward and landward translation of the profile was noted in the interval between neap and spring tides" was reported and the results were generally regarded as confirmatory, examination of the results is not convincing as to their significance to and agreement with the Bruun Rule. Also, it is not clear that spring tides, which of course have water levels both higher and lower than the average, should be equated to a sea level rise since the average water level is unchanged. Moreover, it is not clear that the Bruun Rule was meant to apply on such a short-term basis especially recognizing that short-term changes in wave climate and convergences of longshore sediment transport can play an important role in beach profile changes.

Dubois (1975, 1976, 1977) has reported on shoreline changes in Lake Michigan in association with a 30 cm rise over a 35 week period. The shoreline recession of 7 m was regarded as substantiation of the Bruun Rule.

Rosen (1978) has evaluated the Bruun Rule on the Virginia shoreline of Chesapeake Bay. Using 14 beach profiles, Rosen found that the errors in predicted erosion rates on the eastern and western shores were +58% and -7% with the positive percentages indicating that the predicted erosion exceeds the measured. As expected, considering smaller groups of profiles, the errors were larger.

Hands (1983) has evaluated the Bruun Rule employing a series of 25 profiles along 50 km of the Lake Michigan eastern shore over a 7 year period. During this period, the water level rose by 0.51 m and then fell by 0.31 m. Fig. 7.4 from Hands shows that the shoreline responded to the changes in water level, although with a lag. Hands recommends that in the absence of other information the "depth of limiting motion" be taken as twice the significant wave height.