

muscle SLAB



We wanted to let you know that Bekker Engineering and MuscleSlab have joined forces to design and develop this innovative product to alleviate building risk.

The research has been done and the planning is underway. The issue of risk to homes in the coastal hazard zone caused by "storm events" and rising sea levels is real.

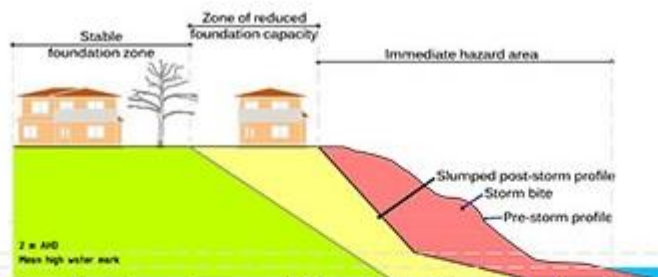
MuscleSlab has the solution needed when building your home on the coast and waterways on flood prone lands and tidal river areas.

MuscleSlab Foundation System with deep piled foundations of durable steel secures your structure into solid ground below the attack line of waves and sand

This attack line is known as the SCOUR ZONE of the sea and sands.

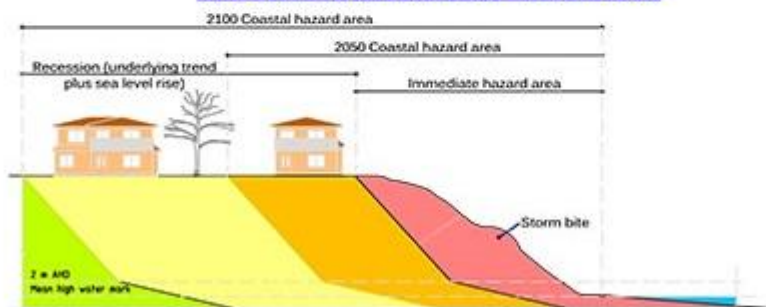
Diagrams here show how this is achieved.

COASTAL EROSION HAZARD



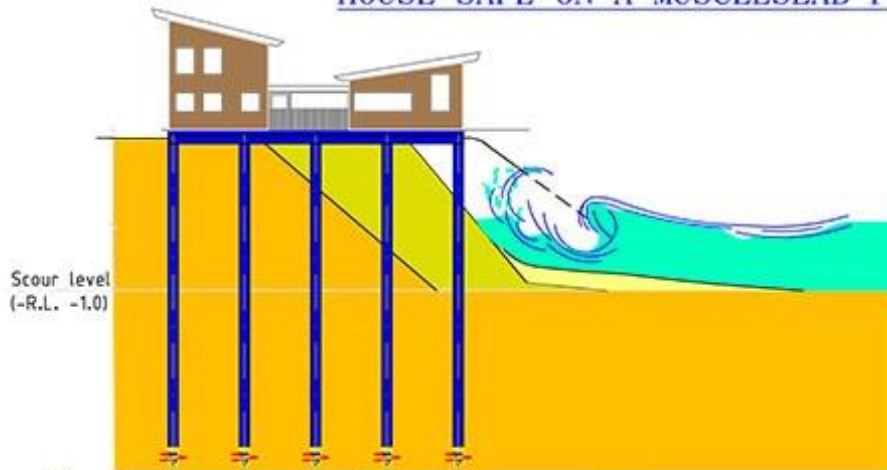
Idealized schematic of a dune profile depicting the immediate hazard area and associated zone of reduced foundation capacity (after Nielsen et al 1992)

CURRENT GOVERNMENT PLANNING



Idealized schematic of a dune profile depicting the 2050 high hazard coastal zone and 2100 high hazard coastal zone.

HOUSE SAFE ON A MUSCLES LAB FOUNDATION



Coastal creep during storm event

AN UNPROTECTED HOUSE ON NORMAL FOUNDATION



Coastal creep during storm event

For decades now scientists and engineers have investigated the levels of sand scour, that is, the soil and sand which will be quickly and forcefully washed away during these predicted "Storm Events "

In some cases this could be 6 metres deep!! The energy and force of the sea is breathtaking!

MuscleSlab specialises in solving these issues for the future.

www.muscleslab.com.au