Coastal Management Options Protect



There are a mix of options for responding to sea level rise and coastal hazards for both new development and intensification of existing developed areas.

All options have challenges and opportunities.

The protect group of options seek to hold the line by protecting coastal areas from the sea using soft protection and/or hard protection.

Soft protection such as dune and beach nourishment/replenishment (e.g. sand push-ups) and wetland restoration can assist in reducing the impacts of natural hazards on coastal development while protecting a number of other values including cultural, coastal habitats and species, landscapes, public access and recreation.

Hard protection includes hard structural measures such as coastal protection structures (sea walls), groynes, stopbanks, tide banks, and causeways. They modify natural coastal processes. Their purpose is to deter or prevent coastal erosion or seawater inundation affecting those coastal areas they are built to protect. However, they tend to shift these issues to other parts of the coast. The location and design of hard protection may result in the degradation of the environmental, cultural, access and recreational values of beaches and coastal areas. Their use can also result in unintended outcomes such as 'end wall effects' and liability issues.

The New Zealand
Coastal Policy Statement
2010 discourages the use of
hard protection structures and
promotes the use of alternatives
including natural defences/
soft protection.











