Coastal Unit B: Whirinaki

The Northern and Southern Cell Assessment Panels for the Clifton to Tangoio Coastal Hazards Strategy recommended a series of adaptation pathways to respond to coastal hazard risks along the Hawke's Bay coast.

Solutions considered ranged from no or low intervention to soft engineering (e.g. beach renourishment), hard engineering (e.g. sea walls), and managed retreat.

The selected pathways are identified as being the preferred method for responding to coastal hazard risks for each individual coastal unit while providing a cohesive and logical response along the coast.

Pathway for coastal hazard management at Whirinaki

Renourishment in the short term, followed by renourishment + control structures in the medium term and then a sea wall in the long term is the preferred pathway for managing coastal hazards at Whirinaki.

WHIRINAKI – PREFERRED PATHWAY				
Short term (0 - 20 years)	\rightarrow	Medium term (20 – 50 years)	\rightarrow	Long term (50 - 100 years)
Status Quo / Renourishment	\rightarrow	Renourishment + Control Structures	\rightarrow	Sea wall



Indicative renourishment and control structures location at Whirinaki.

Adaptation thresholds for Whirinaki

Adaptation thresholds describe a situation where performance measures are no longer being met or start to fail. These are the adaptation thresholds that have been developed for Whirinaki. They describe situations that the community wants to avoid by managing coastal hazard risks.

ADAPTATION THRESHOLD

Coastal inundation causing the loss of one or more essential services affecting the majority of the community.

How long: At least 48 hours

How often: More often than once every 5 years.

Community-wide coastal inundation causing damage to multiple buildings/service.

How long: Any duration

How often: More often than once every 5 years.

Any serious injuries and/or fatalities that occur as a result of a coastal erosion or coastal inundation event.

Civil Defence emergency is declared in response to coastal inundation or coastal erosion.

How often: More often than once every 10 years.

50% of an affected coastal community consider that a permanent loss of amenity has occurred as a result of coastal erosion or coastal inundation impacts

50% of the community report actual or perceived property purgatory effects i.e. actual or foreseeable damage to their properties from coastal erosion or coastal inundation and uncertainty about being able to recover their losses

50% of properties are unable to secure building insurance for losses from coastal hazards.

Access to and use of the beach, coastal reserves and/or recreational facilities is prevented as a result of coastal inundation.

How long: At least 7 days

How often: More often than once every 5 years.

Coastal erosion in Whirinaki affecting Whirinaki Road and/or North Shore Road, causing loss of road access for the majority of the community.

Buildings in Whirinaki are deemed uninhabitable as a result of coastal hazards (e.g. loss of septic tanks, building structural integrity etc).

