11A Paekākāriki Seawall

Erosion

Paekākāriki Adaptation Area

Takutai Kāpiti.

Pathway 1

MCDA Score 63

MCDA Ranking 1=

Short term Status Quo & Enhance	Planned works in the LTP for like-for-like replacement of the Paekākāriki sea wall, increased community education and emergency management.
Medium term Protect - Sea Wall	New coordinated sea wall along the same alignment as the Paekākāriki sea wall.
Long term Re-establish the line with a protection structure	A hybrid approach of retreat and hard engineering that involves retreating the minimum number of properties possible and re-establishing the shoreline landward of the existing shoreline with a new protection structure.

Cost + Loss $206.4M	Total Pathway Cost $200.1M		
Cost + Loss Ranking 1			
Damages Avoided $38.3M	Damages Avoided Ranking 2	Number of Properties Still Exposed (2130) 30	

Pathway 3

MCDA Score 63

MCDA Ranking 1=

Short term Status Quo & Enhance	Planned works in the LTP for like-for-like replacement of the Paekākāriki sea wall, increased community education and emergency management.
Medium term Re-establish the line with a protection structure	A hybrid approach of retreat and hard engineering that involves retreating the minimum number of properties possible and re-establishing the shoreline landward of the existing shoreline with a protection structure.
Long term Enhance protection structure	Add material to the protection structure to increase resilience and design life.

Cost + Loss $208.1M	Total Pathway Cost $194.3M		
Cost + Loss Ranking 2			
Damages Avoided $30.9M	Damages Avoided Ranking 3	Number of Properties Still Exposed (2130) 30	

Pathway 4

MCDA Score 58

MCDA Ranking 3

Short term Status Quo & Enhance	Planned works in the LTP for like-for-like replacement of the Paekākāriki sea wall, increased community education and emergency management.
Medium term Re-establish the line with protection structure & dune reconstruction	A hybrid approach of retreat and hard engineering that involves retreating the minimum number of properties possible and re-establishing the shoreline landward of the existing shoreline with a new protection structure. Dune reconstruction to be undertaken in front of the structure to provide additional protection.
Long term Protect - Beach renourishment	Adding sediment to the beach system, either onshore or in the nearshore to maintain the dune re-construction undertaken in the medium term

Cost + Loss $275.3M	Total Pathway Cost $269.9M		
Cost + Loss Ranking 3			
Damages Avoided $39.2M	Damages Avoided Ranking 1	Number of Properties Still Exposed (2130) 1	

11B Paekākāriki

Inundation

Paekākāriki Adaptation Area

Takutai Kāpiti.

Pathway 2

MCDA Score **59** MCDA Ranking **1**

Short term Status Quo & Enhance	Maintain existing management infrastructure, increase community education and emergency management.
Medium term Enhance Package	Enhance existing inundation protection and increase community education and emergency management.
Long term Accommodate Package	Pro-actively raise floors of homes which could be flooded, and/or flood proof homes and infrastructure.

Cost + Loss $7.9M	Total Pathway Cost $7.9M			
Cost + Loss Ranking 1				
Damages Avoided $21,458	Damages Avoided Ranking 1	Number of Buildings Still Exposed (2130) 2		

Pathway 1

MCDA Score **51** MCDA Ranking **2**

Short term Status Quo & Enhance	Maintain existing management infrastructure, increase community education and emergency management.
Medium term Enhance Package	Enhance existing inundation protection and increase community education and emergency management.
Long term Additional Hard Protection	Installation of earth bunds/stopbanks to prevent sea water entering the settlement.

Cost + Loss $10.3M	Total Pathway Cost $10.3M			
Cost + Loss Ranking 2				
Damages Avoided $10,425	Damages Avoided Ranking 3	Number of Buildings Still Exposed (2130) 4		

Pathway 3

MCDA Score **46** MCDA Ranking **3**

Short term Status Quo & Enhance	Maintain existing management infrastructure, increase community education and emergency management.
Medium term Additional Hard Protection	Installation of earth bunds/stopbanks to prevent sea water entering the settlement.
Long term Enhance New Inundation Protection	Enhance existing flood protection infrastructure.

Cost + Loss $10.4M	Total Pathway Cost $10.3M			
Cost + Loss Ranking 3				
Damages Avoided $14,267	Damages Avoided Ranking 2	Number of Buildings Still Exposed (2130) 3		

12A Paekākāriki South

Erosion

Paekākāriki Adaptation Area

Takutai Kāpiti.

Pathway 3

MCDA Score 63

MCDA Ranking 1

Short term Enhance Package	Private owners increase the resilience of their structures by adding material to existing structures and increasing community education and emergency management.
Medium term Re-establish the line with protection structure	A hybrid approach of retreat and hard engineering that involves retreating the minimum number of properties possible and re-establishing the shoreline landward of the existing shoreline with a new protection structure.
Long term Enhance Seawall	Enhance and maintain the setback sea wall as the shoreline retreats back to that position.

Cost + Loss $168.9M	Total Pathway Cost $135.1M		
Cost + Loss Ranking 2			
Damages Avoided $54.3M	Damages Avoided Ranking 2	Number of Properties Still Exposed (2130) 0	

Pathway 4

MCDA Score 61

MCDA Ranking 2

Short term Enhance Package	Private owners increase the resilience of their structures by adding material to existing structures and increase community education and emergency management.
Medium term Re-establish the line with protection structure & dune reconstruction	A hybrid approach of retreat and hard engineering that involves retreating the minimum number of properties possible and re-establishing the shoreline landward of the existing shoreline with a protection structure. Dune reconstruction to be undertaken in front of the seawall to provide additional protection.
Long term Protect - Beach renourishment	Adding sediment to the beach system, either onshore or in the nearshore to maintain the dune re-construction undertaken in the medium term.

Cost + Loss $167.9M	Total Pathway Cost $133.9M		
Cost + Loss Ranking 1			
Damages Avoided $54.1M	Damages Avoided Ranking 3	Number of Properties Still Exposed (2130) 1	

Pathway 2

MCDA Score 54

MCDA Ranking 3

Short term Enhance Package	Private owners increase the resilience of their structures by adding material to existing structures and increase community education and emergency management.
Medium term Protect - Seawall	New coordinated sea wall along current sea wall alignment in front of the properties.
Long term Re-establish the line with protection structure	A hybrid approach of retreat and hard engineering that involves retreating the minimum number of properties possible and re-establishing the shoreline landward of the existing shoreline with a new protection structure.

Cost + Loss $177.5M	Total Pathway Cost $143.7M		
Cost + Loss Ranking 3			
Damages Avoided $54.4M	Damages Avoided Ranking 1	Number of Properties Still Exposed (2130) 0	