Excluding Long-List Actions PAA

CAP Meeting 17th January 2024

Refining list of Actions

The purpose of this session is to exclude options from the long-list that the CAP consider to not be suitable for the Paekākāriki Adaptation Area – based on knowledge of the area and community.

The TAG have undertaken a pre-excluding of the options to get the CAP started, based on whether actions would be technically feasible, or were likely to succeed.

The following reasons for excluding actions should be considered and recorded in the Table. If there are reasons other than these, then they should also be recorded:

- A. Will not provide for the objectives defined by CAP
- B. Does not have a good track record of being successful in this environment
- C. Insufficient or limited space to implement the action
- D. Not suitable for the environment it is being applied to
- E. It is not a practical solution
- F. Limited benefits
- G. Other

The remaining actions deemed relevant for application within the Adaption Area by the CAP will form the 'short list' of actions, which can then be used to form adaptation pathways (Phase 2, Step 4).

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ENHANCE ACCOMMODATE

PROTECT

RETREAT

AVOID

We maintain and improve what we are already doing



- Enhance existing erosion protection structures
- Enhance existing inundation protection
- Enhance access and ramps
- Dune and wetland enhancement/resilience
- Emergency management
- Environmental monitoring
- Community education and risk awareness
- Private owners' responsibility

We live with the hazard



- Relocatable buildings
- Raising floor levels
- Flood-proofing buildings
- Flood proofing infrastructure

We keep the hazard away



Soft Engineering (Erosion)

- Beach drainage
- Beach scraping
- Renourishment
- Dune reconstruction

Hard Engineering (Erosion)

- Sea walls (vertical, revetment, buried, interlocking)
- Groynes
- Vertical permeable sills
- Detached breakwater

Inundation controls

- Controlled/planned mouth openings of lagoons or rivers
- Culvert outfalls
- Flood gates
- Storm surge barriers
- Stopbanks
- Earth bunds
- Pump stations

We move away from the hazard



- Buyouts/Land Acquisition
- Future Interests
- Land Swaps
- Leasebacks

We don't move into the way of the hazard in the first place



- Raising minimum floor levels of new builds
- Reduce further intensification or development
- Trigger-based or time limited land use consents
- Zoning and setback controls
- Transferable development rights

TAG Excluding

ENHANCE ACCOMMODATE

PROTECT

RETREAT

AVOID

We maintain and improve what we are already doing



- Enhance existing erosion protection structures
- Enhance existing inundation protection
- Enhance access and ramps
- Dune and wetland enhancement/resilience
- Emergency management
- Environmental monitoring
- Community education and risk awareness
- Private owners' responsibility

We live with the hazard



- Relocatable buildings
- Raising floor levels
- Flood-proofing buildings
- Flood proofing infrastructure

We keep the hazard away



Soft Engineering (Erosion)

- $\frac{}{}$ Beach drainage (B) & (C)
- Beach scraping (D), (E), & (G)
 Renourishment (B), (D) & (F)
 Dune Reconstruction (D) & (C)

Hard Engineering (Erosion)

- Sea walls (vertical, revetment, buried, interlocking)
- Groynes (E) & (D)
- Vertical permeable sills (B) & (D)
- Detached breakwater (D) & (F)

Inundation controls

- Controlled/planned mouth (D) & (F) openings of lagoons or rivers
- Culvert outfalls
- Flood gates (D) & (F)
 - Storm surge barriers (E) & (F)
- Stopbanks
- Earth bunds
- Pump stations

We move away from the hazard



- Buyouts/Land Acquisition
- Future Interests
- Land Swaps
- Leasebacks
- Retreat
- Re-establish the line with a setback seawall

It is recommended that retreat is considered as a broad option by the CAP, and the details of the actions to implement the retreat are considered further after the Takutai Kapiti process is completed.

We don't move into the way of the hazard in the first place



- Raising minimum floor levels of new builds
- Reduce further intensification or development
- Trigger-based or time limited land use consents
- Zoning and setback controls
- $\begin{array}{cc} \bullet & \text{Transferable development} \\ & \text{rights} & \text{(E)} \end{array}$



ACTIONS

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