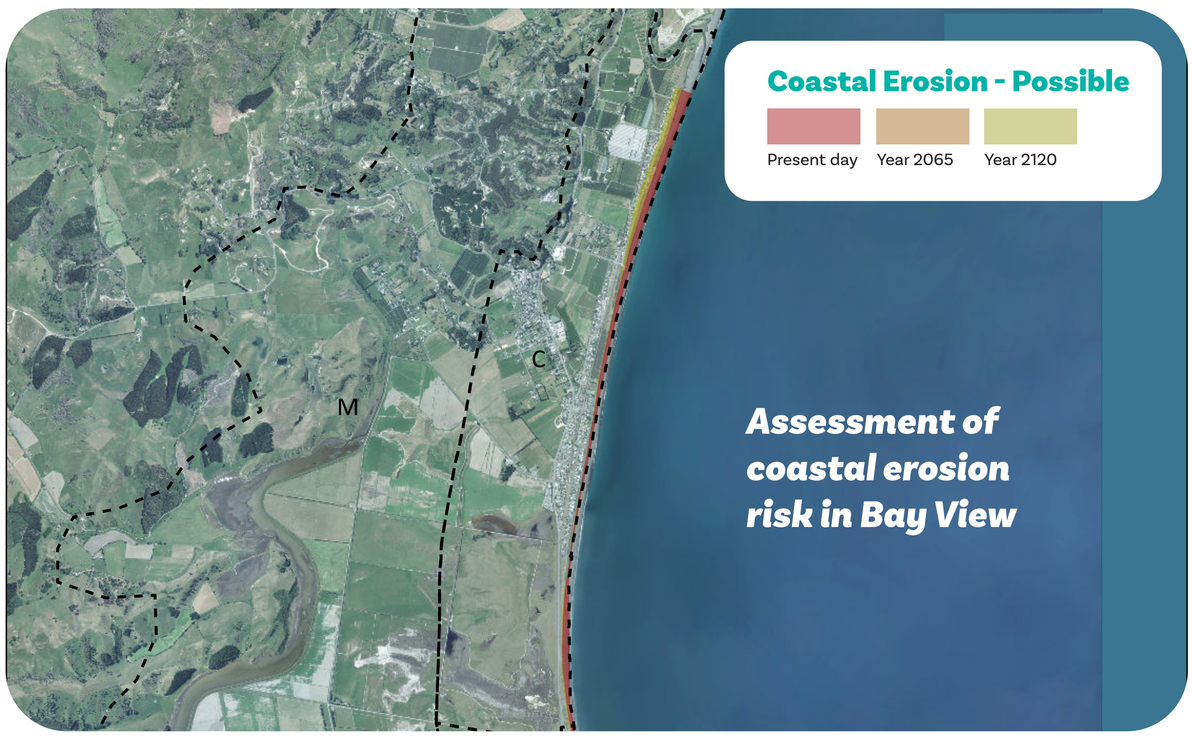
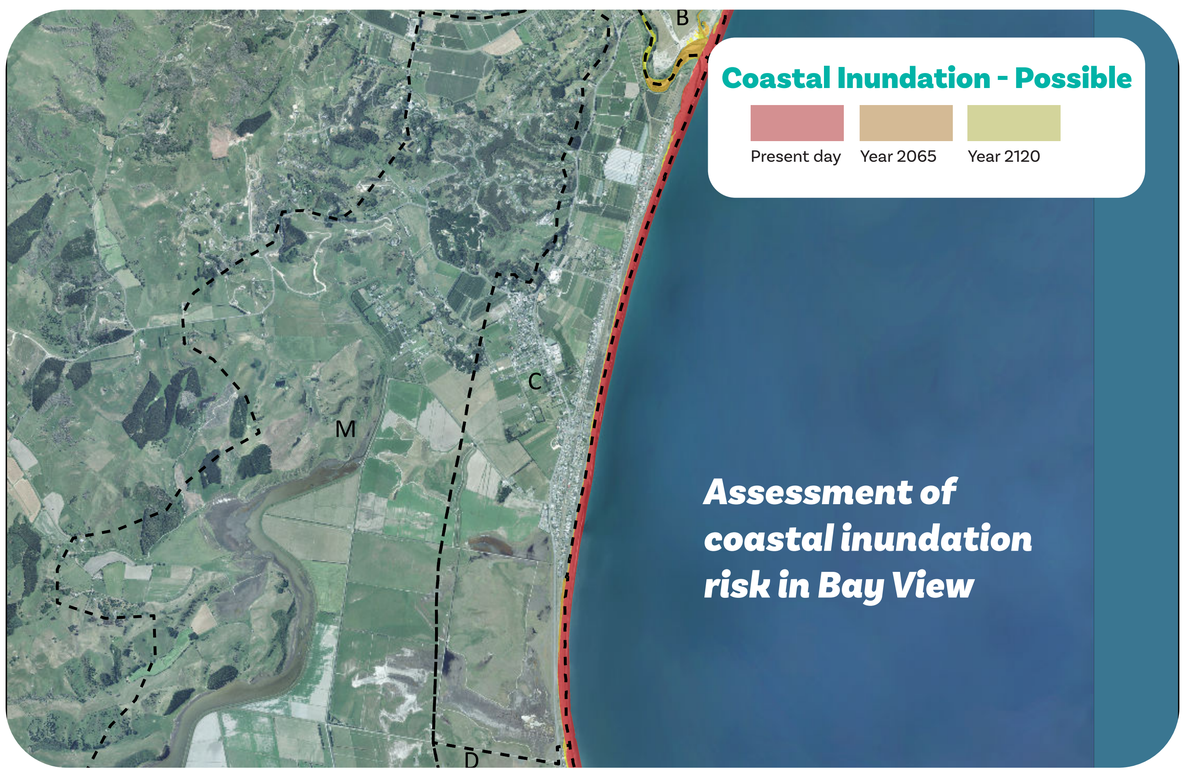
Bay View

Unit c

What is the problem?





Current situation

- **Bay View has future erosion risks for properties on Le Quesne Road, likely affecting Le Quesne Road itself and access to about 80 houses at the northern end of the road by 2065.**
- **By 2065 there will possibly also be 15 properties directly affected by erosion.**
- **By 2120, 60 properties are likely to be directly affected by erosion and another 40 with loss of access.**
- **There are no significant inundation risks over entire period.**

Considerations for Bay View

- Biggest risk is the impacts on reefs from sediment / turbidity caused by beach renourishment.
- Controls will need to be in place to ensure that only appropriate material is used for beach renourishment.
- Consent conditions will need to be imposed requiring appropriate monitoring of any effects of renourishment on reefs and that appropriate actions would be required in the event that an adverse effect is identified.

Thresholds

Bay View Proposed Thresholds

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 Bay View affecting Le Quesne Road, causing loss of road access for majority of the community.

When will we act?

What will we do?

Pathways

The pathways assessed for each unit were confirmed following an extensive options development/ assessment process and used the principles of Dynamic Adaptive Planning Pathways ("DAPP").

The preferred pathway was selected following assessment of technical criteria including the management of hazard, risks and the impact of the option on the community: cultural, social and economic and impact on the natural environment.

The pathways for Bay View include:

- Gravel renourishment in the short term.
- Control structures may be groynes or offshore breakwater, introduced in a staged manner in the medium term. Gravel renourishment continues.
- Continued renourishment further south at Westshore would reduce the requirement and frequency of beach replenishment in the Bay View area.
- Control structures raised and lengthened over long term, with additional beach renourishment, in order to offset effects of sea level rise properties at unacceptable risk

Rationale behind recommendation:

- 5th highest score under Multi-Criteria Decision Analysis ("MCDA") undertaken by the Panel.
- Ranked 2nd under economic analysis undertaken by an independent economist.
- Considered to be the preferred pathway overall, taking into account the MCDA score and economic analysis, and the preferred pathway at Westshore which will provide some benefit for Bay View.
- Retains flexibility and ability to adapt when triggers are reached.
- The vote in favour of Pathway 3: 9 members in favour (full support)

BAY VIEW - PREFERRED PATHWAY

Short Term (0-20 years)	→	Medium (20-50 years)	→	Long term (50-100 years)
Status Quo / Renourishment	→	Renourishment + control structures	→	Renourishment + control structures