Planned Retreat

Some of the pathways developed under the Coastal Strategy recommend managed or planned retreat in the long term. It is likely that this is the eventual outcome for other coastal communities, depending on how far and how fast sea levels rise.

But what does planned retreat look like? How much will it cost, and when does it need to happen?

Tonkin & Taylor Ltd (T+T) were asked to prepare some guidance for how we might implement a planned retreat in Hawke's Bay and the possible high-level costs of doing so. This report was completed in 2022.

To do this work, they looked at what might need to be retreated, by when, and at what cost, if nothing were done to reduce coastal hazard risks.

It is important to emphasise that this work is theoretical and based on models that try to show the possible impact of rising seas. This shows us what our future might look like, if we do nothing to reduce risks from coastal hazards.

What might need to move and when?

Using models to show possible coastal changes in the short, medium and long term in the 9 priority units identified by the Strategy, T+T have estimated what assets might need to be relocated if we do nothing to reduce risks from coastal hazards.

ES 1: Potential number and value of private property losses within all high risk units

	0 to 20 years	20 to 50 years	50 to 100 years	Total
No. of properties	106	339	515	960
Land value	$27,853,000	$113,275,000	$223,824,000	$364,952,000
Capital value	$55,241,000	$227,910,000	$474,085,000	$757,236,000

ES 2: Potential length (m) of road and rail reserves and large council assets (No.) impacted by erosion

Feature	0 to 20 years	20 to 50 years	50 to 100 years	Total
Rail	0	98	341	439
Road	1,754	7,774	5,911	13,685
State Highway	0	1,434	538	1,972
Wastewater treatment plant	0	0	1	1

What would it cost to move?

T+T then estimated how much it might cost to implement a planned retreat for all nine priority units.

ES 3: Total high level cost estimate for each stage and timeframe for all nine coastal units including potential losses included in enabling investment

Stages	0-20 years	20-50 years	50 - 100 years	Total
Planning, preparation, and engagement	$16,929,505	$37,990,007	$72,924,003	$127,843,515
Enabling investment (including accounting for private property losses, management, and administration)	$67,253,550	$236,670,000	$508,509,750	$812,433,300
Active retreat	$105,244,050	$317,314,381	$557,476,475	$980,034,906
clean up	$7,158,125	$28,709,313	$31,138,940	$67,006,378
Totals	**$196,585,230**	**$620,683,700**	**$1,170,049,168**	**$1,987,318,099**

ES 4: Percentage of total cost for each stage and timeframe

Stages	0-20 years	20-50 years	50 - 100 years	Total
Planning, preparation, and engagement	9%	6%	6%	6%
Enabling investment	34%	38%	43%	41%
Active retreat	54%	51%	48%	49%
Clean up	4%	5%	3%	3%

Re-establishment of property and assets

There are a range of potential sites close to most of the areas affected by coastal erosion and inundation that could be established for affected members of those communities to move to, although District Plan changes would likely be required to enable this to occur.

If a community wide planned retreat is to occur, people within Westshore and Ahuriri could move to a subdivision development within Bay View, the closest unit to these two areas.

Options for planned retreat

There are several different ways that proposed planned retreat of private property could be undertaken.

These include:

- Property acquisition - involves a public entity acquiring private properties in at-risk locations. Approaches for acquisition of coastal property
  - Purchase and lease back
  - Purchase, covenant, sell
  - Purchase then demolish
- Planning provisions - such as plan changes, development and building restrictions.
- Signalling - involves a reduction in the council investments and a reduction in the level of services provided in the high-risk area.
- Withdrawal of Insurance - Insurers are already withdrawing from some individual flood/earthquake prone properties and as climate hazards escalate this will accelerate.

What does all this mean for Hawke's Bay?

The T+T report has told us:

1. There are lots of properties and assets that may need to relocate in future
2. Planned retreat could be implemented in a few different ways, but each has challenges
3. The cost of planned retreat is huge

We also know that the Government has been working on a proposed Climate Change Adaptation Act, although we're not expecting it to come out until later in 2023.

That Government is preparing new legislation just for this topic recognises how complex planned retreat really is. We need to work out:

- Who should pay for planned retreat?
- How can we afford it?
- How should it be achieved?
- What is the role of local and central government?
- What would it mean for individual property owners?

Planned retreat vs. Managed retreat

While the more commonly used term is 'Managed Retreat', we are starting to use Planned Retreat in preference as it speaks to the proactive, planned and coordinated consideration of the movement and rebuilding of communities well in advance.

We welcome any thoughts you may have.

The Strategy team is engaging with Government on these questions too.