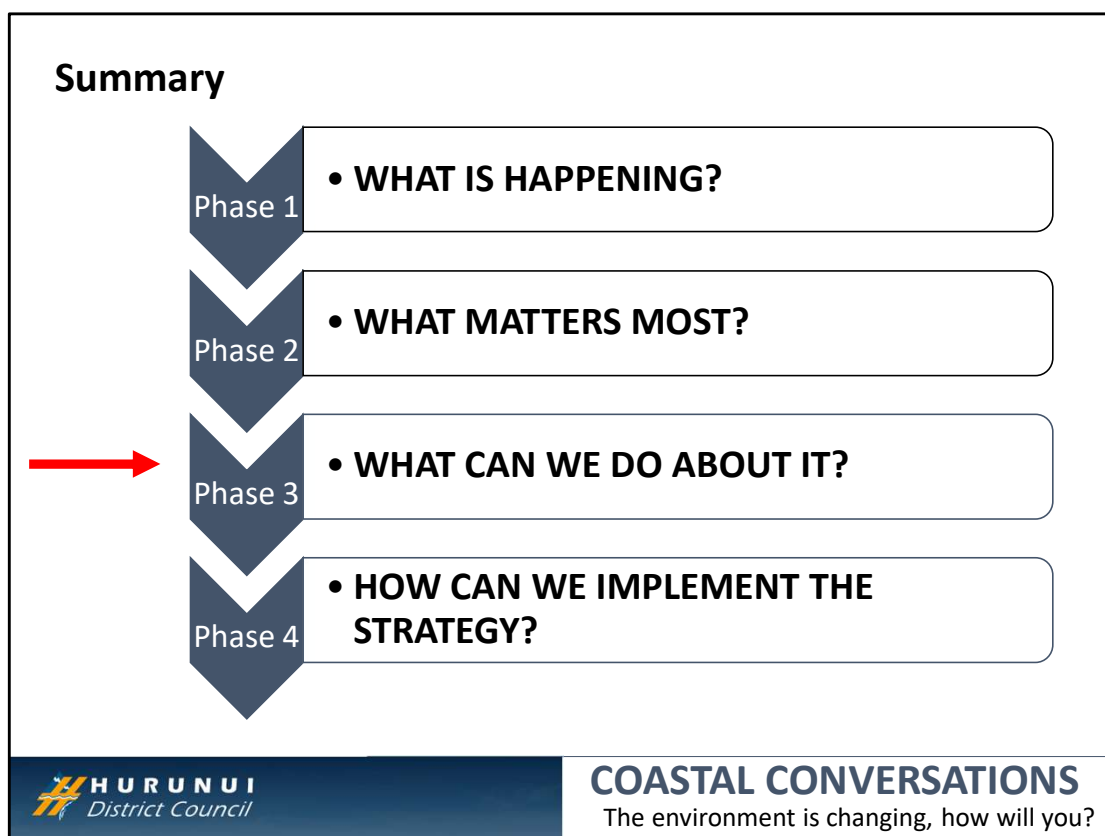


Welcomes



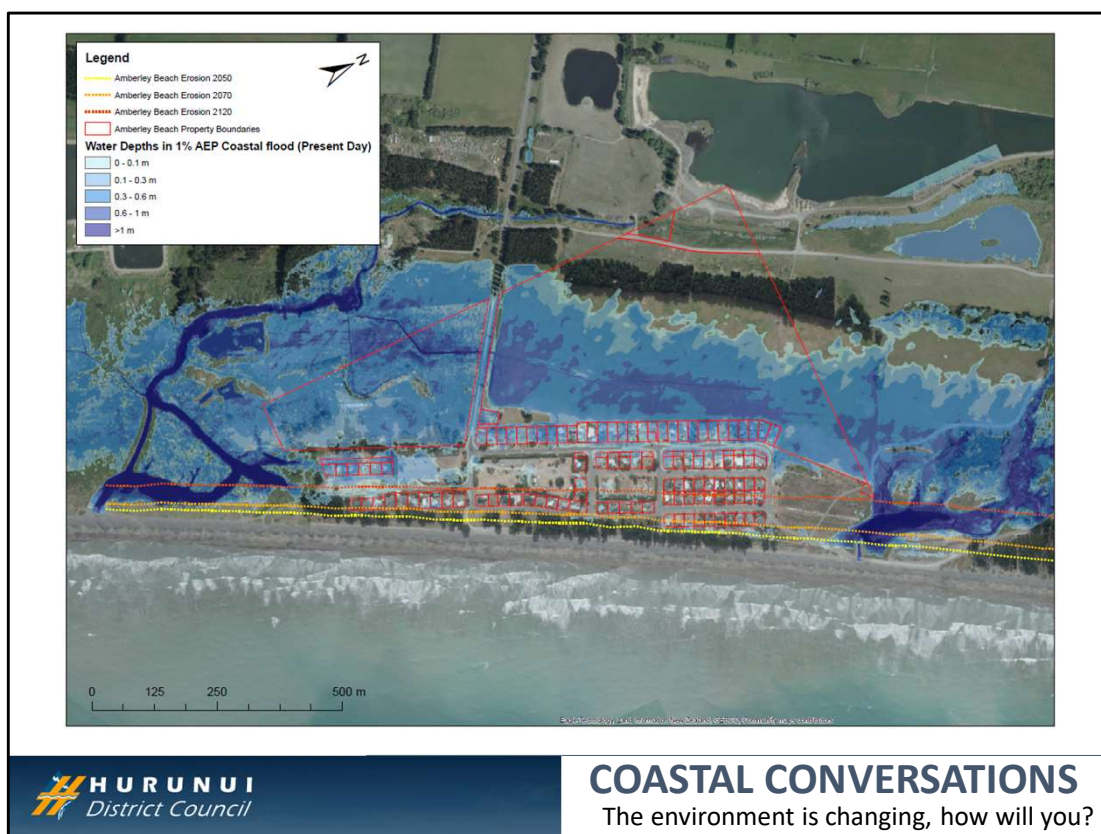
We are now firmly in phase three of the project. We have explored a long list of options, narrowed these down to a short list of options and workshopped potential pathways with the community.

Dynamic Adaptive Pathway – a concept

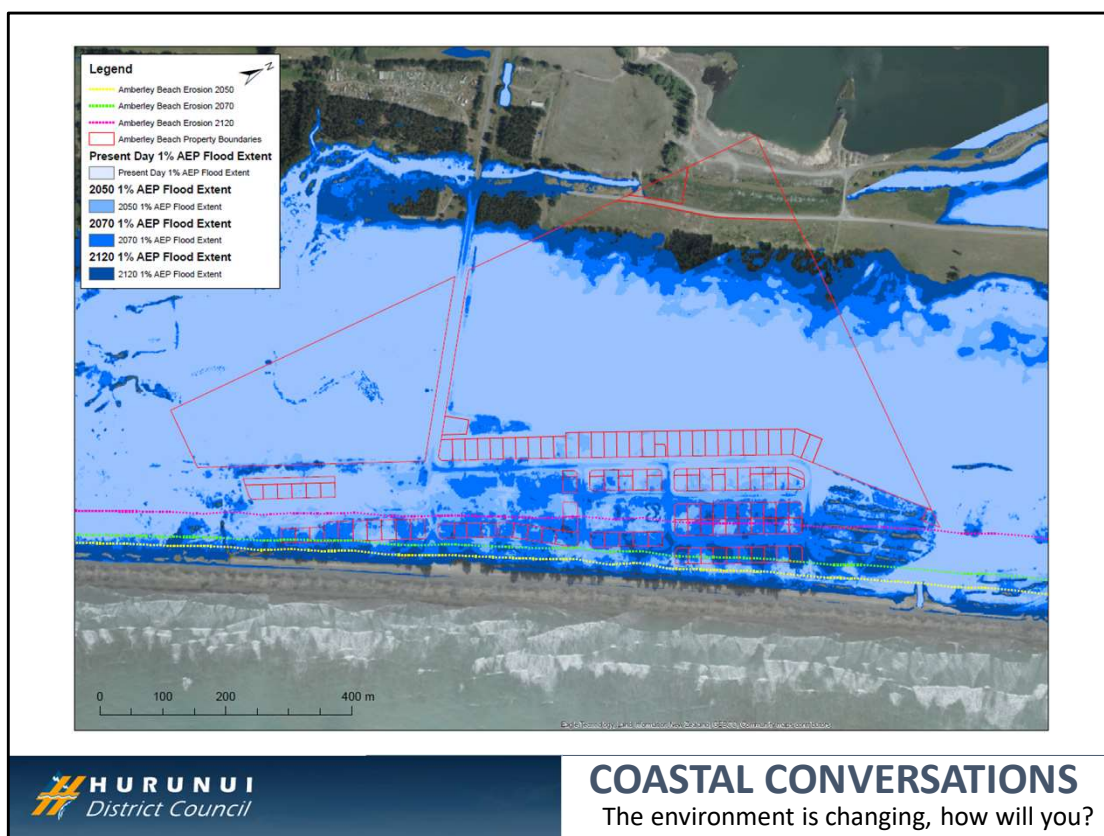


Council is adopting a dynamic adaptative pathway approach. The benefit of this approach is it allows us to make decisions despite great uncertainty. It is trigger based.

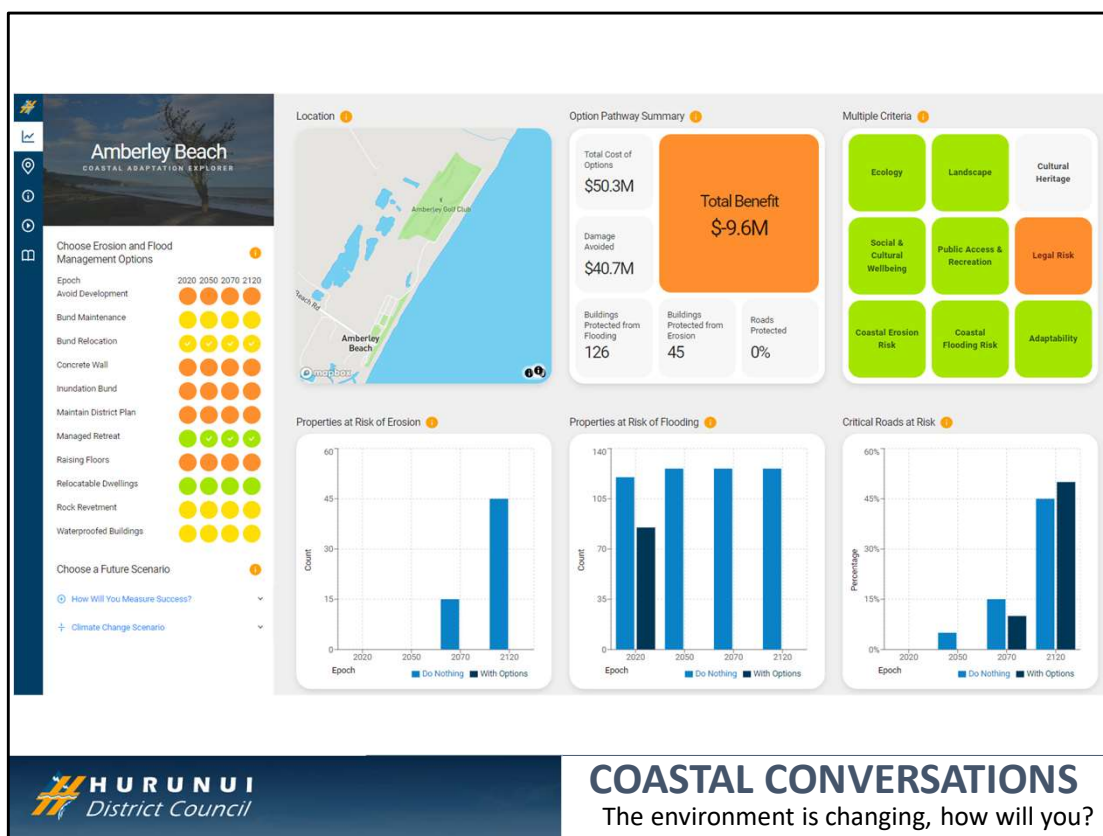
This means that if flooding and erosion don't follow the course Jacobs have predicted then we don't need to do anything. If they reach that point sooner then we enact the plan sooner. Part of the concept is also that you have a preferred pathway but you leave as many options as possible open.



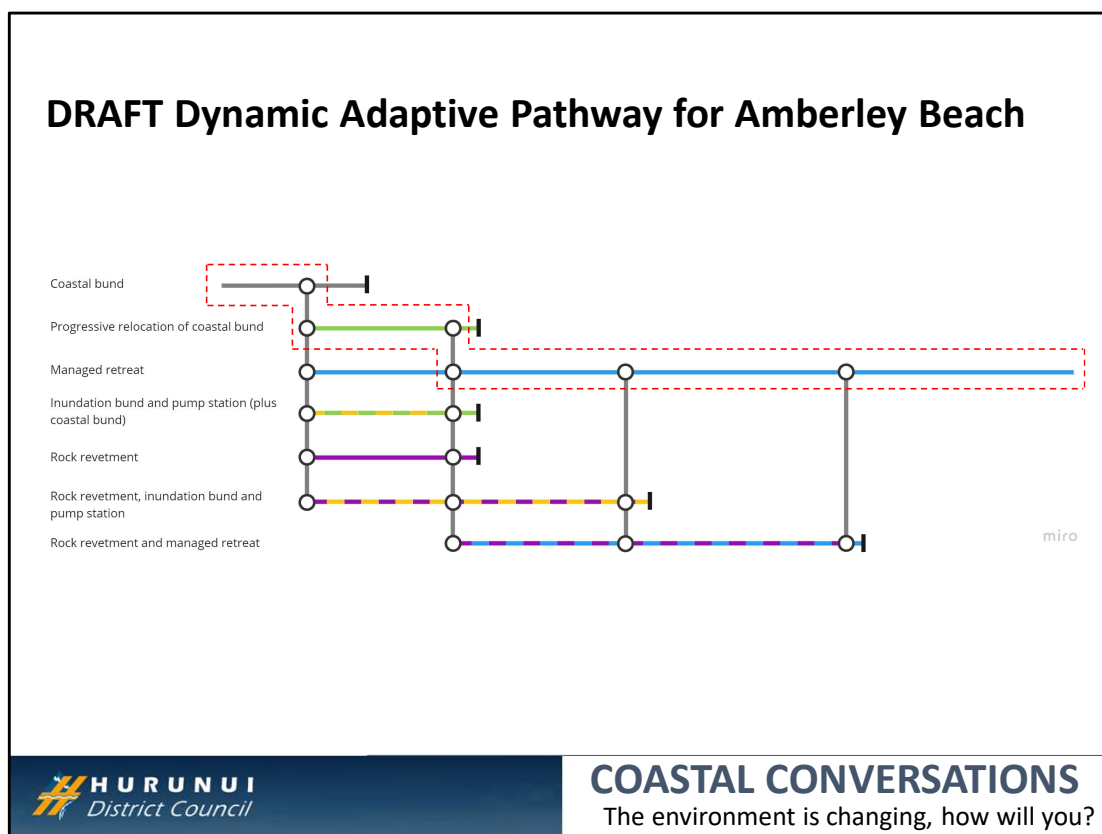
This map shows the present day 1% AEP coastal flood risk. The darker the blue, the deeper the flooding. With the bund in place the primary flood hazard is around the back of the settlement.



This map shows how the risk changes over time. Again this is a 1% AEP event so a big event. This map only show flood extend, not flood depth.



At our previous session we used the Coastal Adaptation Explorer to look at the costs, benefits and effectiveness of various options. This works by turning different options on over different timeframes. The graphs down the bottom compare the option(s) to the do nothing risk.



Following on from the last session the preferred pathway is shown by the red box.

I want to explore the idea of managed retreat with you more tonight. Engineering solutions are easy. We pay an expert like Jacobs to design and construct a solution. There are lots of examples nationally and internationally to draw from. Managed retreat is harder. There is only one example of proactive retreat of freehold land we're aware of and the purpose of that retreat was about river enhancement and removed dwellings from the flood zone.

DAPP identifies the end point of each option, shown by the black dashes. Prior to reaching that point a decision needs to be reached. The circles show the possible options at each decision point. While a preferred path is identified and planned for alternative options should remain available.

While we can put loose timeframes around this a DAPP approach is based on the idea that we don't need to do anything until a threshold is reached. Therefore, if the bund stops being effective in 10 years time we can look to move to another option, alternatively if the bund is still effective in 50 years time we have not over invested.

Managed retreat – buy outs vs land swaps

Buyouts usually involve a government agency acquiring at risk land to reduce the exposure to risk. The dwellings can then be demolished, and the land reserved as public space or leased for temporary use.

This land could also be purchased by a government agency, covenants placed on the property and then the property sold on. This could include provisions such as the need to remove the dwelling and remediate the site when a certain trigger point is reached.

Land swaps involve property owners of high-risk land being offered the opportunity to swap their title for a similar parcel of lower risk land. The original sections are then used as reserve land or in some situations can provide space for coastal renourishment works to protect the remaining development. Land swaps can enable communities to relocate to a lower risk area together.



COASTAL CONVERSATIONS
The environment is changing, how will you?

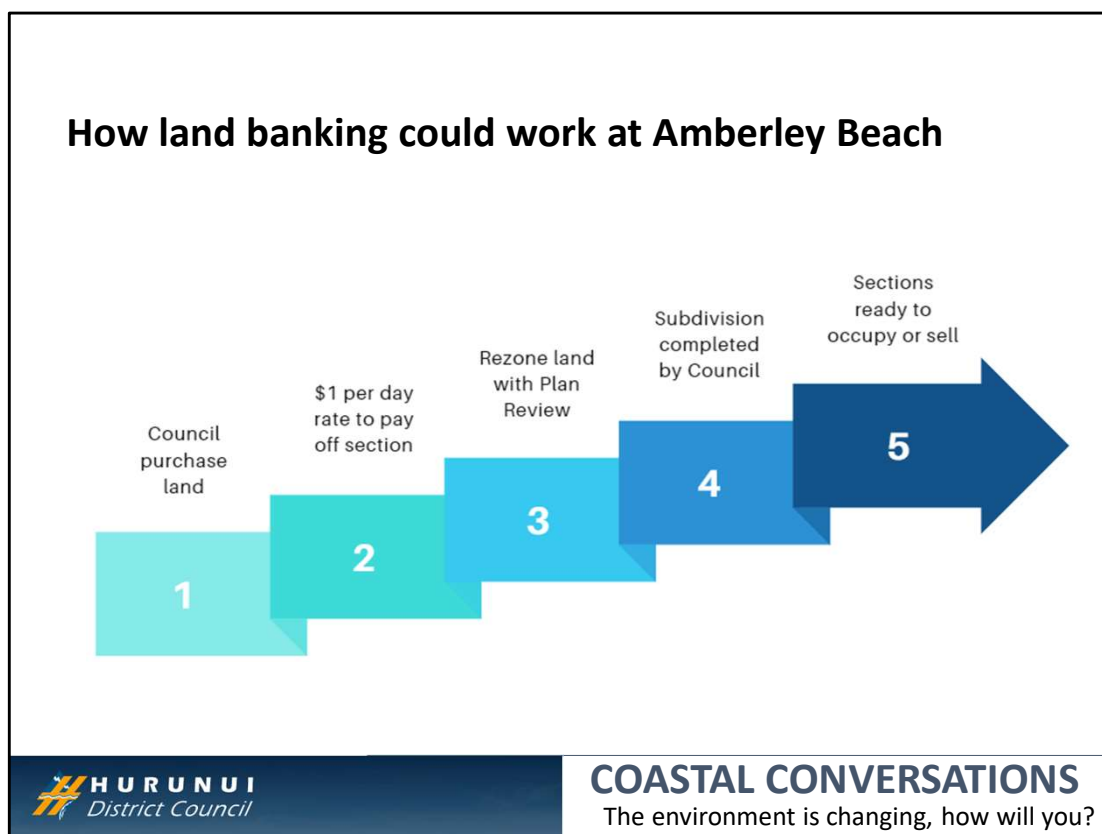
What is managed retreat? Looks to move people proactively away from the natural hazard risk and let nature do its thing. This is done in an organised way ahead of disaster striking. There are two main approaches. A buy out or a land swap.

Properties at Amberley Beach have an average RV of \$307,000 – there are limited places in NZ where land and a dwelling could be purchased for this price even with a buyout. Council is not in a position to fund a buyout and therefore we have focused our resource on developing a land swap scenario.

Managed retreat – funding

Insurers	Central Government	Hurunui District Council	Property Owners
<ul style="list-style-type: none"> Will pay out retrospectively but currently will not fund proactive retreat. Their role is to manage the risk the company faces and will likely pull insurance when a property is too risky to insure. 	<ul style="list-style-type: none"> Climate Adaptation Act is being drafted which is to cover information around managed retreat. Unlikely to be a national buyout scheme like what happened in the Christchurch red zone. 	<ul style="list-style-type: none"> Does not have enough money to buyout all affected properties but can help facilitate retreat through debt funding. 	<ul style="list-style-type: none"> For many it is the permanent and only dwelling. Some have limited funds to retreat or secure a new mortgage.

Therefore if no one is able to fund retreat how do we raise the money to assist in funding it?



- Council could purchase alternative land.
- Amberley Beach ratepayers pay about \$1 per day for the next 30 years to buy their freehold section.
- Land is rezoned during next District Plan Review and Council undertakes the subdivision on behalf of the community.
- We could look to purchase enough land to create a larger subdivision and use the additional sections to help offset the cost of completing the subdivision and installing the services so this cost would not need to be passed on to Amberley Beach.
- Each property owner would then own a section on the terrace valued at \$200,000+ today for around \$11,000 paid off over 30 years.
- This equity can be used to help secure a mortgage to build a dwelling OR the section could be sold. If the existing dwelling can be relocated it can be moved to the new section.
- IF managed retreat was not required the land could be sold and the rates collected returned.
- IF managed retreat is required sooner then the plan is advanced.

Feedback on retreat proposal	How would you do it?