# Korero mai | Let's talk **Adapting to sea-level rise** Allandale

Let's find a way

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# Let's talk about sea-level rise in Allandale

We know that sea levels are rising in response to climate change. Locally, they've risen by more than 10 centimetres over the last 15 years in Whakaraupō Lyttelton Harbour. We expect to see a further 14 to 23 centimetres by 2050, and between 38 centimetres and 1 metre by 2100. Over time, this is going to have a big impact on how we live, use and move around our coastline and low-lying inland areas. We don't have all the answers about what life is going to look like in the future, but we know there are some important decisions we can all be making now to make sure we're better prepared.

You can help us all get ahead of the impacts of sea-level rise in Allandale and the wider Whakaraupō Lyttelton Harbour to Koukourarata Port Levy area by being a part of this kōrero.

### Kōrero mai | Let's talk

Head online to **letstalk.ccc.govt.nz** to find out more about this and other draft adaptation pathways and provide your feedback. Alongside Allandale, we're also wanting feedback on draft adaptation pathways for Koukourarata Port Levy, Teddington, Purau, Te Wharau Charteris Bay and Rāpaki.

You can pick up a consultation booklet for any of the other areas at Lyttelton and Diamond Harbour libraries, or get in touch with us and we'll send them out to you.

You need to give us your feedback by 10 December 2023.

Phone us on 03 941 8096 or email letstalk@ccc.govt.nz

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Te Hapū o Ngāti Wheke Inc is the Papatipu Rūnanga legal entity that represents Ngāti Wheke, the hapū with manawhenua status over the Whakaraupō basin and surrounding areas as outlined in the Port Cooper Deed. This entire area is culturally significant to Ngāti Wheke and sustains the hapū. Te Hapū o Ngāti Wheke has a strategic plan, a key part of which is the protection and enhancement of the whenua, moana and awa. Ngāti Wheke hopes to be a part of the leadership in climate action for future generations.

### Mō tātou, ā, mō kā uri ā muri ake nei. For us and our children after us.

Christchurch City Council recognises the rangatiratanga of Ngāti Wheke over its whenua and is working in partnership to plan for impacts on public assets and places of value.

### Timeline

### 2021

You provided feedback on the Coastal Adaptation Framework and Catalogue of Coastal Hazard Adaptation Options. Members of the community expressed interest in joining the Whakaraupō Lyttelton Harbour – Koukourarata Port Levy Coastal Panel.

### 2022

The Coastal Adaptation Framework was adopted by the Council. The Coastal Panel was established.

### 2022-2023

You told us what you value most about living in the area. The Coastal Panel turned this information into community objectives that were shared with the public.

The Coastal Panel identified six Priority Adaptation Locations to focus on in this round of planning based on the level of exposure to coastal hazards. These locations were shared with the public.

Each adaptation option was considered for alignment with the community objectives by the Coastal Panel. The options were also scored for effectiveness, feasibility, and environmental impact by the Specialist and Technical Advisory Group, alignment with mana whenua values by rūnanga, and the Council's guiding principles by Council staff.

Private property owners at risk from coastal hazards in the short term have been contacted directly with more information about their individual risk.

### Here now

Based on this information and input, the Coastal Panel has drafted adaptation pathways for each Priority Adaptation Location and is seeking your feedback.

### 2023-2024

Preferred pathways will be identified and shaped up with greater detail. These will be shared with the public for input.

Preferred pathways will be presented to the Council for a decision to either accept, amend or reject the recommendation.

### **Our conversation to date**

#### This isn't the first conversation we've had with you about coastal hazards, and it won't be the last.

Guided by your feedback to date, the Coastal Panel has drafted adaptation pathways that outline different ways we could address the risks from coastal hazards in Allandale over time. The process to come up with these draft pathways has been supported by the Specialist and Technical Advisory Group.

Before we go any further with this work, we'd like to know what you think about these pathways, to make sure we're on the right track.

On the left is a reminder of the work to date and what's yet to come.

The Coastal Panel is a diverse group of 13 community members and rūnanga representatives from the Whakaraupō Lyttelton Harbour and Koukourarata Port Levy area, alongside a couple of city-wide representatives. The Coastal Panel will present adaptation pathways for each Priority Adaptation Location to the Council, who will make the final decision on whether to accept, amend or reject the pathways.

**The Specialist and Technical Advisory Group** is made up of various experts from across a range of fields and organisations. It supports the Coastal Panel's decision-making by providing information, advice and guidance.



### What we've heard from you so far

Last time we touched base, you told us what you value about living in Allandale and the wider Whakaraupō Lyttelton Harbour to Koukourarata Port Levy area, and the things you'd like to see in the future. The Coastal Panel turned this important feedback into community objectives (see below), which were shared in early 2023. The panel has since used these objectives to help come up with adaptation options and to guide the development of adaptation pathways.

In your feedback to us it was clear that some of the things you value most about Allandale are:

The peaceful, natural setting that the "quietness of the bay", "native vegetation", and "the proximity to the hills and the sea" creates.

The "Māori heritage" and "strong sense of identifying with the harbour and with Banks Peninsula" that creates a "great sense of community".

Having access to "the cliff-track walks, rock formations and beaches" and "being able to easily access the wharf and beach to go swimming and kayaking".

You also have a clear vision about what you do and don't want to see in the future:

You do want to see "more native vegetation and wildlife", "hills covered in bush", and access to a "natural coastline with native plantings and reserves".

You want any new development to be carefully considered to avoid "buildings and infrastructure falling into the sea because it was built in the wrong place".

These are all things the Coastal Panel has kept in mind when thinking about how to address coastal hazards in Allandale.

### **Community objectives**

#### **Community resilience**

Foster the preparedness of communities (current and future) to determine how best to support themselves through times of disaster and disruption.

#### Community and culture

Retain a sense of community, social connectivity and sense of place by recognising the importance of heritage, identity, community spaces, places (such as parks and marae) and neighbourhoods.

#### Infrastructure

Ensure infrastructure, such as roads, jetties, waste, communications, electricity and water networks, are sufficiently resilient to support the health, safety and wellbeing of communities now and in the future.

#### Access to natural areas

Protect and enhance access to the land and the sea for mahinga kai, cultural activities, recreation, leisure and enjoyment for current and future generations.

#### **Environment and landscapes**

Protect landscape amenity and protect the natural environment for mahinga kai, natural resources and native biodiversity.

### **Important features in Allandale**

### The road

Small sections of the Governors Bay-Teddington Road are at risk of coastal hazards. This road is part of a network that provides access between the city and communities around Whakaraupō Lyttleton Harbour and Koukourarata Port Levy.

### The landfill

The Allandale landfill contains household rubbish that was dumped directly onto an area of mudflat. The landfill is about 1.4 hectares in size and was used from the mid-1960s to 1993, when it was officially closed, covered, and planted over. Rock armouring was built along the coastal edge of the landfill in 2010 to protect it from erosion. The land underneath the parking area to the south of the landfill is also expected to contain some waste material because of how close it is. This area isn't protected by a rock wall, so we check the coastal edge of the parking area on a regular basis to make sure no old waste has been uncovered.

### The natural environment

The inter-tidal mudflats and remaining saltmarsh, found at the head of Whakaraupō in Allandale, hold significant conservation value and potential. Saltmarsh ecosystems are nationally rare and threatened because humans have changed many of the natural environments they exist in. There's an opportunity to restore the saltmarsh in this area, enhancing its ecological value.

The inter-tidal mudflats provide important habitat for a range of seabirds, including the second-largest flock of Bar-Tailed Godwits and South Island Pied Oystercatchers, making them of national importance. The mudflats also make up the largest area of inter-tidal habitat in Waitaha Canterbury. The area has a rich cultural past and is important to mana whenua as a place of mahinga kai.



Allandale Domain facilities.

### **Community facilities**

### Allandale has several community facilities, including:

**The Governors Bay Foreshore Track** is a scenic walkway that follows the coastline, connecting Allandale to Governors Bay. The walkway has historical and cultural significance, having been built by prisoners of Parihaka in the mid-1800s while they were imprisoned in the area. The walkway is protected in many areas with rock armouring, parts of which are collapsing and in need of repair, but other areas have no armouring at all. There are plans to strengthen some of these at-risk areas, but this will focus on existing issues rather than long-term protection.

Allandale Hall was built in the early 1900s, extended in the 1970s, and extensively repaired after the Canterbury Earthquakes. It has mainly been used as a function space by locals and other Christchurch residents about a dozen times a year, and is valued for its scenic, rural setting. However, the hall is currently closed for health-and-safety reasons because a lack of airflow under the floor has caused the floorboards to become rotten and mouldy. It's expected that the high groundwater table has also added to the problem. A decision is yet to be made about if and how the hall will be repaired.

The hall sits on **Allandale Domain**, a large, grassed area that was once used as the Diamond Harbour rugby grounds. The domain is now mainly used for recreation, dog-walking and as a pitstop to stretch the legs and use the public toilet which is separate to the hall. The domain is low-lying and can get very wet during heavy rain and storms. The coastal edge of the domain will naturally start to turn back into wetland and saltmarsh as sea levels rise.



## Allandale will be increasingly impacted by coastal hazards

Coastal flooding, coastal erosion and rising groundwater all pose a risk to Allandale. The images below show that as sea levels rise, the area will experience deeper flood events over a larger area. The water may also stay around for longer as groundwater levels rise and it gets harder for surface water to drain away into the soil. Areas at risk of erosion are likely to lose land at a faster rate as sea levels rise.

It's important to note that while we have a good understanding of how coastal hazards will impact us, it's hard to predict the rate at which sea levels will rise further in the future. The rate of change will depend on global greenhouse gas emissions and what impact this has on our climate. If different tipping points are reached, it's possible we'll see sea levels rise much more quickly. That's why it's important to have a plan in place for the future of our coastal communities.

#### **Current sea level**



1m sea-level rise

### 40cm sea-level rise



2m sea-level rise



These images show how this area will be affected by coastal hazards as sea levels rise, during a 1-in-100-year-storm event.

 Depth of flooding\*

 0-20cm

 20-50cm

 50-100cm

 >100cm

\*In many places, the areas at risk from flooding are also at risk from rising groundwater.

### Important things to know

- While we're planning for communities as a whole, the Council will focus its public funds towards public infrastructure. In Allandale this means the focus of adaptation planning will be the public road, the landfill, the walkway, the hall, and the domain, some of which are more critical than others.
- While the Council is focusing its planning on public assets, we're aware that privately owned assets are also at risk, and some property owners will feel anxious and uncertain about their future. We've prepared a factsheet for property owners, which you can find on our website at **ccc.govt.nz/coastalhazardsinfo**
- It's also important to note that some adaptation options and pathways will, if progressed, have an impact on private property owners. For example, if privately owned land needs to be purchased to allow for things like building a new road, or if Council-owned assets are moved away from their current location, this may affect nearby properties. You might want to follow the Council's work over time so that you'll be aware if it affects you directly.
- Some adaptation options for the Whakaraupō Lyttelton Harbour to Koukourarata Port Levy area would need significant investment from residents and ratepayers, yet may only benefit relatively small numbers of people. The Council and residents have limited resources and need to balance the considerable investments needed for climate adaptation with other investments needed across the district. It's also important to remember that any major works will take time to happen. These factors mean we'll all need to learn to live with some of the impacts of rising seas and a changing climate.
- Given these challenges, there's no guarantee that existing Council assets will be maintained and available into the future. The closure, removal, or retreat of different assets are options that may be considered for any asset in response to changing conditions and needs across the district.
- We don't yet have all the information about what these options might look like if put in place, but we think it's important to get your thoughts on them now, before we invest time and money drawing up plans that might not align with the community's views for the area.



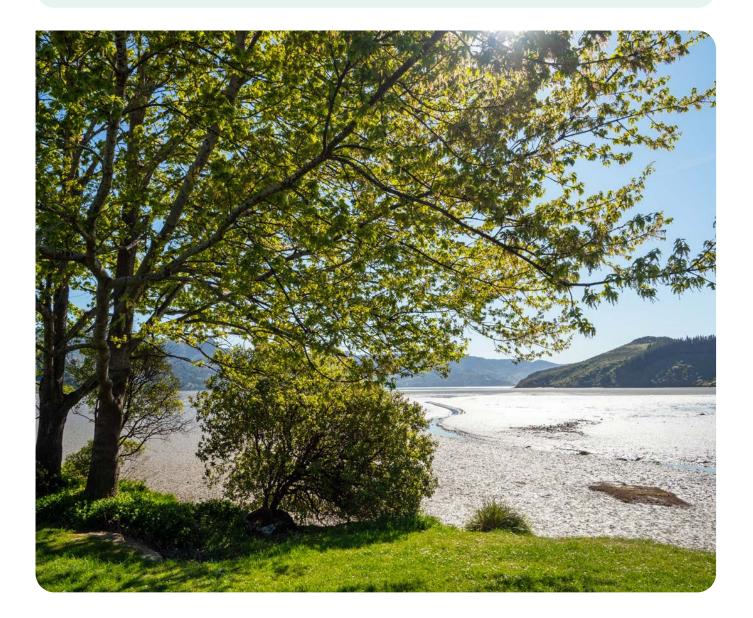
### What can we do about coastal hazards in Allandale?

The historic landfill, Allandale Hall and domain, the walkway, and a section of the Governors Bay-Teddington Road are all vulnerable to coastal hazards. If nothing is done, coastal hazards will cause the front of the landfill to erode, releasing contaminated material into the harbour. The road and foreshore track will flood, causing the road to close more regularly and increasing maintenance costs. The Allandale domain will be eaten away by erosion along the shorefront, and a combination of rising groundwater and more frequent flooding will mean the domain and Allandale Hall will become increasingly damp.

The Coastal Panel has considered the workable options that would address the risks to each of these assets. These options are set out in the section titled 'Adaptation pathways'.

Sometimes the way we decide to manage one asset will have an impact on how the other assets could be affected by coastal hazards and the options we have available to manage those risks. In Allandale, decisions to protect the landfill or foreshore track could have an impact on the road and the neighbouring domain and hall.

The Coastal Panel has identified two approaches that help to show how different adaptation options might fit together. These are outlined on the opposite page.



### 1. Hold the line

We could protect the at-risk foreshore track, parking area and landfill. This option could be used to buy a bit more time or a lot more time, depending on how much is invested. A decision could then be made to switch to a 'work with nature' approach and move away from coastal hazards.

A 'hold the line' approach would likely involve repairing, improving, and extending the existing rock armouring in this area to protect against erosion and potentially raising the surface of the road and foreshore track above future flood levels. These measures would not solve the risk posed by flooding for all assets, or rising groundwater, and may need to be supported by improved culverts and drainage.

Extending the hard edge along the shorefront would have an impact on the natural environment, preventing the mudflats and saltmarsh from migrating inland as sea levels rise and conditions change. Armouring one section of the shorefront would also have an effect on the neighbouring land, causing Allandale domain to erode faster. Protection of the domain itself isn't proposed as an option.

The Allandale Hall and public toilet could be maintained for some time, depending on whether the existing issues with the hall were repaired and how much was invested. The options to manage coastal hazard risk to the hall are the same under both the 'hold the line' and 'work with nature' approaches. They include removing the hall and replacing it with a different type of outdoor structure, building a new hall in a new location, or simply removing the hall.

### 2. Work with nature

In time, it may be better to remove the landfill and work towards creating a natural shoreline that supports the ecological values in the area. This approach could be used when it becomes too hard and expensive to maintain the existing armouring along the shorefront of the landfill – likely at least 10 years from now – or when a 'hold the line' approach becomes less effective.

This approach would avoid hard-protection options along the coastline, meaning the foreshore track would need to be moved or closed at a point in time – perhaps in the next 20 years – when it becomes unsafe to use. The at-risk sections of road could be flood-proofed and protected as discussed above, or possibly moved out of the hazard zone, although this would mean a significant amount of work and investment.

Removing hard edges and infrastructure from along the coast would allow it to function naturally again. Native saltmarsh and wetland ecosystems could be regenerated, enhancing the ecological values in the area.

To best align with a 'work with nature' approach, Allandale Hall would be removed, a new hall built in a new location, or the hall could be replaced by a facility that worked better with the surrounding environment. Options to adapt the hall are the same as those described under the 'hold the line' approach.

Both of these approaches come with their own opportunities, risks and costs, and they may need to be used at different times or could be more appropriate for some assets than others. Regardless of what we do, it's going to get harder, more expensive and environmentally disruptive to keep public assets in this area, particularly near the shorefront where coastal erosion, flooding and groundwater all pose a risk.



### **Adaptation pathways**

The adaptation pathway maps on the following pages help to show which adaptation options could be used to address the risks of coastal hazards for each asset. How we use or combine these options over time is something we want your feedback on.

Acting at the right time is an important part of a pathway. For example, it's hard to predict when it will become too costly and disruptive to keep repairing the walkway, and it's likely some parts will have issues before others. To get around this uncertainty, we'll make the decision to move from one option to another based on signals and triggers. In other words, we'll act when we start to see changes in conditions. The Coastal Panel will be thinking about what these signals and triggers might look like in more detail.

### Some key terms explained

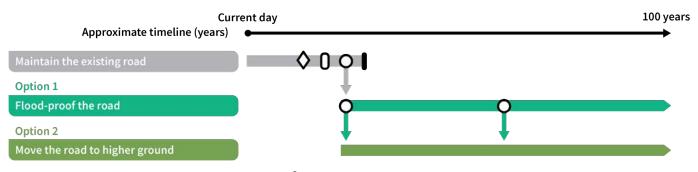
- Signals are early warnings that the current option isn't working and that a different one will be needed soon. Signals may be environmental, such as sea-level rise, or other indicators such as increasing maintenance costs.
- **Triggers** happen after signals and tell us it's time to act and change options. Making changes to infrastructure, like roads, can take a long time, so it's important that triggers take these lead-in times into account, before a threshold is met.
- Transfer points indicate switching from one option to another.

Thresholds are conditions we want to avoid or a level of risk that's unacceptable. Identifying thresholds helps us to understand when we need to put a new option in place. In some cases, a threshold might reflect the community's tolerance for something (such as road closures) and can be shaped by community input.



### Road

Maintaining the at-risk sections of Governors Bay-Teddington Road is expected to become harder and more expensive over time. The adaptation pathway map below shows that at a certain point – likely around 20 to 30 years from now – changing conditions will mean a decision needs to be made to avoid increasing costs and disruption. As we near this point, we could look to flood-proof the road to different levels to buy us a bit more time or a lot more time. Alternatively, we could move the road straight away, or wait until a point in time when flood-proofing doesn't work as well, and then move it.



Key: 🚫 Signal 🚺 Trigger 🔿 Transfer point 📲 Threshold (See page 10 for a detailed explanation of symbols)

| Options   | Opportunities  | Risks   |
|---|--|---|
| Flood-proof the road<br>('Hold the line'<br>approach) | It'd allow the roads to be used for longer in the same location.   | It'd become increasingly expensive to maintain as sea<br>levels rise.                       |
|   | The short-term costs would be lower than moving the road.  |   |
|   | Flood-proofing and protection can be done<br>in many ways for different lengths of time,<br>making it a flexible option. | Depending on the scale of work, it could impact the environment and may be hard to consent. |
|   | The length of road at risk from coastal<br>hazards is quite short, so this option could<br>be simple to do.              |   |

Estimated cost: Our best estimate right now is about \$800,000 to \$1.2 million to raise the 300-metre section of road by one metre.\*

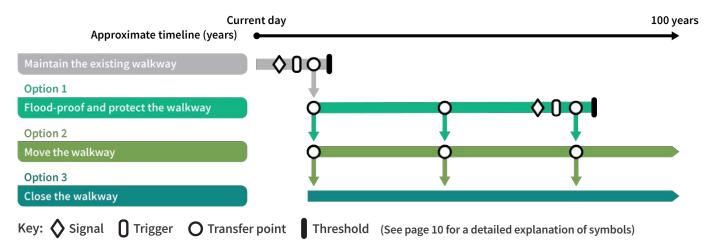
| Move the road to<br>higher ground<br>('Work with nature'<br>approach) | It'd completely avoid the risk of coastal<br>hazards, providing long-term access to and<br>through Allandale. | A suitable location would need to be found to move<br>the road to. This would likely require the purchase of<br>private property at some point in the future, which the<br>Coastal Panel and the Council acknowledge could be a<br>difficult process for the landowners. |
|---|---|--|
|   | Moving out of a coastal hazard zone would reduce future maintenance costs.                                    | Property owners may need new access routes to and from their homes.  |
|   |   | While this road is very important to its users, usage<br>numbers are low when compared to other roads<br>across the district. This could be a challenge when<br>trying to weigh up the large cost of moving it against<br>investing money on other projects or options.  |

**Estimated cost:** Our best estimate right now is about \$6 million to \$9 million to relocate the at-risk part of the road away from the flood-prone area.\*

### Walkway

Maintaining the walkway in its current state is expected to become much harder and more expensive over time. Because of its location between the ocean and steep slopes and cliffs, we can't keep maintaining the walkway forever without having a significant impact on the natural environment. In as soon as 20 years, the increasing maintenance costs and impacts of coastal hazards will mean we need to make a change.

As we near this point, we could look to flood-proof and armour the walkway to different levels to buy us a bit more time or a lot more time, depending on the type and scale of work. Alternatively, we could look to relocate the walkway in the first instance, or at a point in time when the flood-proofing and armouring becomes less effective. Alternatively, we could look to close the walkway at the point when defences start to fail and the relocation option proves to be too difficult or costly.



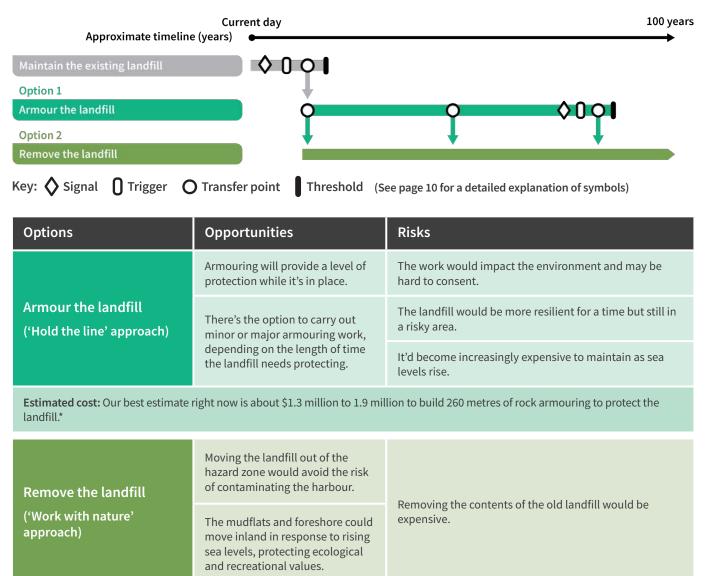


| Options  | Opportunities   | Risks   |
|--|---|---|
| Flood-proof and armour<br>the walkway<br>('Hold the line' approach)  | It'd allow the track to be used for longer in the same location.  | The work would impact the environment and may be hard to consent.   |
|  | The short-term costs would be lower than moving the track.  | The track would be more resilient for a time but still in a risky area.   |
|  | Some sections of the track are in good condition and won't need work for a while.   | It'd be increasingly expensive to maintain.   |
| Estimated cost: Our best estimate right now is about \$10 million to \$15 million to build two kilometres of rock armouring to protect the walkway between Allandale and Governors Bay.* |   |   |
| Move the walkway<br>('Work with nature'<br>approach)   | It'd completely avoid the risk of coastal hazards, providing a long-term access track.  | We'd need to find suitable land for the<br>at-risk sections of walkway. This could be<br>challenging considering how steep the land is. |
|  | The mudflats and foreshore could move inland<br>in response to rising sea levels, protecting<br>ecological and recreational values. | Building a pathway on steep land will have construction challenges and the track wouldn't be as accessible as the current one.          |
| Estimated cost: Our best estimate right now is about \$10 million to \$15 million to build a new walkway in a higher location away from the coast.*                                      |   |   |
| Close the walkway<br>('Work with nature'<br>approach)  | Closing the walkway would be the most cost-<br>effective option, removing the need for future<br>maintenance.                       | The walkway is a valued community asset, so closing it would be unpopular.  |
|  | The mudflats and foreshore could move inland<br>in response to rising sea levels, protecting<br>ecological and recreational values. | The loss of this section of walkway would<br>create an additional gap in the wider Head to<br>Head Walkway network.                     |

Estimated cost: The cost to close the walkway would be relatively low, involving things like signage. It's likely to be less than \$10,000. There would be significant additional costs if the walkway was to be physically removed.\*

### Landfill

Maintaining the landfill with its current defences is expected to be possible for around 10 to 20 more years, then it's only going to get harder and more expensive. As we near this point, the existing armouring could be improved to different levels to buy us a bit more time or a lot more time, depending on the scale of work. Alternatively, the landfill could be removed straight away, or at a point in time when the armouring isn't as effective.



Estimated cost: Our best estimate right now is about \$65 to \$100 million to remove the landfill and restore the natural environment.\*

### Allandale domain

As sea levels rise, we expect the domain will be increasingly impacted by coastal flooding, rising groundwater and coastal erosion.

The adaptation pathway map below helps to show that while the existing sports field might continue to function for a time, nature will eventually take its course and the area will become damper and more difficult to use. The decisions the Coastal Panel is considering are whether to actively encourage the regeneration of the area, and at what point. It could be straight away, or it could be once the sports field can no longer be used and maintenance becomes too difficult. These decisions are something we want your feedback on because they'll influence the way the area can be used.



Key: Signal I Trigger O Transfer point Threshold (See page 10 for a detailed explanation of symbols)

| Option                | Opportunities  | Risks   |
|-----------------------|--|---|
| Naturalise the domain | There's an opportunity to work with nature by encouraging the regeneration of significant native ecosystems in the area. | There'd be an upfront cost to do any planting,<br>landscaping and other development if an<br>active approach was taken.       |
|                       | After some upfront costs, there'd be low<br>ongoing maintenance costs to support the<br>regeneration.                    | The way we used this space would change<br>over time. This change would happen more<br>quickly if we took an active approach. |
|                       | Regenerated wetland and saltmarsh would provide benefits to local wildlife.  |   |

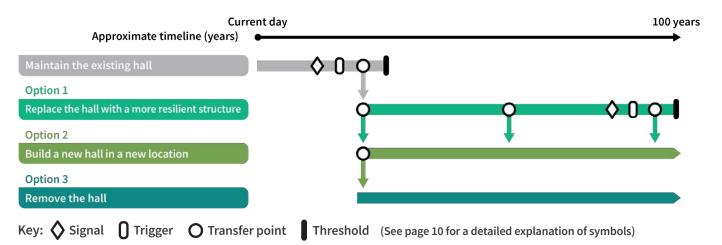
**Estimated cost:** To naturalise the domain, a number of different things could be done. We could do very little and allow the area to change naturally as sea levels rise. Or we could do things like remove fencing and trees, landscape and plant natives to support the restoration of the area. Depending on the scale of work, this option could have a low cost (tens of thousands of dollars) or a much higher cost if large amounts of planting and landscaping was undertaken, potentially over \$1 million.\*

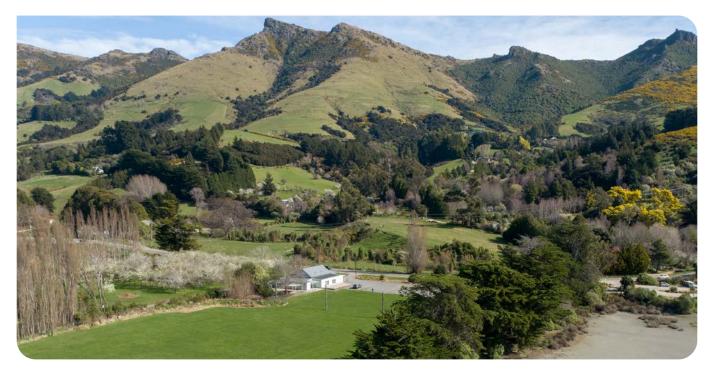
### Allandale Hall

Allandale Hall is currently closed for health-and-safety reasons. Fixing these issues will cost between \$40,000 and \$400,000, depending on how much work is completed and how long the hall is intended to be kept in use. Because of its age, condition and location in a hazard-prone zone, it may be hard to justify investing in these repairs, let alone the investment needed to keep the hall its location once it's at risk from coastal hazards.

Coastal hazards are unlikely to significantly impact the hall for another 20 to 30 years because of its elevation and distance from the coast. If the issues are fixed, then the hall could likely stay in its location over this timeframe. However, high groundwater levels and rainfall-related flooding affect the hall already. Because it's used as a function venue, the state of the surrounding grounds will likely have an impact on how often it gets used and what it can be used for.

The adaptation pathway map below helps to show that if a decision is made to repair the hall, we'll still need to take action at some point to address the risk posed by coastal hazards. This action will be needed sooner if the hall isn't repaired. Options to reduce the risk of coastal hazards include replacing the hall with a different kind of facility that's more resilient to future flooding, such as an outdoor shelter. Alternatively, a decision could be made to build a new hall outside of the hazard zone, or to remove the hall straight away, or at a point when the other options become less effective. Moving the hall would likely involve building a new hall in a different location and removing the existing hall.





| Options   | Opportunities  | Risks   |
|---|--|---|
| Replace the hall with a<br>more resilient structure<br>('Work with nature'<br>approach) | There's an opportunity to re-think<br>how the domain and hall are used. A<br>more resilient structure that supports<br>ecological values and the recreational<br>use of the domain could be built. | Different users of the hall and domain will have<br>different needs. A new structure might meet some<br>needs better than others. |
|   | It'd reduce the risk of coastal hazards.   | An outdoor structure would be more resilient to coastal hazards but would still be in a risky area.                               |

Estimated cost: Our best estimate right now is about \$1.2 million to \$1.8 million to remove Allandale Hall and replace it with an outdoor, covered structure.\*

| Build a new hall in a new                    | It'd completely avoid the risk of coastal hazards, providing long-term use.                  | It'd be very expensive to replace the hall in a new location. |
|--|--|---|
| location<br>('Work with nature'<br>approach) | The old hall could be removed from<br>Allandale reserve and the space<br>returned to nature. | A suitable location would need to be found for a new hall.    |

**Estimated cost:** Our best estimate right now is about \$4.4 million to \$6.6 million to remove Allandale Hall and build a new, similar building in a nearby location. Costs would be much lower if an existing facility/building were to be used instead of building new.\*

| Remove the hall                  | It'd completely avoid the risk of coastal hazards.   | It'd remove a community asset and function venue. |
|----------------------------------|--|---|
| ('Work with nature'<br>approach) | It'd provide an opportunity to restore<br>the natural environment and provide<br>a larger green space (reserve) for the<br>public. |   |

Estimated cost: Our best estimate right now is about \$800,000 to \$1.2 million to remove Allandale Hall and restore and landscape the site.\*

### Moving around the harbour in the future

The main road here and in other communities around the harbour is at risk from coastal hazards, placing the whole network under threat. Over time, it may be realistic and necessary to live with more frequent road disruptions and inconveniences as storms and king tides cause damage. There are also other hazards, such as landslips, that will impact the roads more in the future. Better communication about road closures and detours, such as timely updates to a website or to people's phones, could help road users plan their trips or plan to work from home when it's a better option.

Similarly, jetties, wharves and boat ramps could provide alternative access during or after extreme weather events. In the long term, water access may even provide an alternative to roads, but this would depend on things like the size of the populations that would benefit from it and the cost and alternatives.



### Help us plan for Allandale's future

#### Let us know what you think by 10 December 2023.

Your feedback will help the Coastal Panel work out which combination of options to put forward to Christchurch City Council as the preferred pathway for Allandale, once the options have been developed in greater detail. If approved by the Council, this pathway will guide the management of the public assets in this area over the coming decades – so it's important we get as much feedback from communities as possible.

Spread the word and make sure your friends and whānau living in the area also have a chance to shape their futures.



Online (preferred): letstalk.ccc.govt.nz



Email: letstalk@ccc.govt.nz

Deliver to:

Attention: Krystle Anderson, Engagement Advisor Te Hononga Civic Offices at 53 Hereford Street

by 10 December 2023

Post to: Freepost 178 (no stamp required) Adapting to sea-level rise Attn: Krystle Anderson, Engagement Advisor Christchurch City Council PO Box 73016 Christchurch 8154

### Let's find a way

letstalk.ccc.govt.nz



#### Webinars

We're holding online webinars to talk about the options and to answer questions.

**Rāpaki and Allandale** Wednesday 8 November, 6–7.30pm

**Teddington and Charteris Bay** Wednesday 15 November, 6–7.30pm

**Purau and Koukourarata** Tuesday 21 November, 6–7.30pm

If you're unable to attend, the webinars will be recorded and uploaded

to our webpage and can be watched anytime.

Please register online at letstalk.ccc.govt.nz

#### **Community meetings**

If there's a community meeting you'd like us to attend, please let us know. You can also phone to speak to us.

Krystle Anderson, Engagement Advisor 03 941 8096 letstalk@ccc.govt.nz Help us all get ahead of the impacts of sea-level rise in the wider Whakaraupō Lyttelton Harbour to Koukourarata Port Levy area by being a part of this kōrero.



Find out more about the draft adaptation pathways and provide your feedback.



You need to give us your feedback by 10 December 2023.

