

CONSULTATION ANALYSIS: Draft adaptation pathways for the Whakaraupō – Lyttelton Harbour to Koukourarata – Port Levy area

Introduction

Christchurch City Council (the Council) engaged on the Coastal Panel's draft adaptation pathways for the Whakaraupō – Lyttelton Harbour to Koukourarata – Port Levy area. The engagement initially ran for eight weeks from 16 October to 10 December 2023. However, following feedback from the community the engagement period was extended a further six weeks, over the New Year period, until 21 January 2024 to give groups and individuals more time to provide feedback.

The engagement on the draft adaptation pathways for the Whakaraupō – Lyttelton Harbour to Koukourarata – Port Levy area followed on from previous community engagements from the Coastal Hazards Adaptation Planning team in the area.

At the end of 2021, there was a district-wide engagement period where the draft Coastal Adaptation Framework and the Coastal Hazards Plan Change Issues and Options paper were shared for consultation, and the 2021 Coastal Hazard Assessment was shared for information.

At the end of 2022, community values were sought from people who live, work, or play in the Whakaraupō – Lyttelton Harbour to Koukourarata – Port Levy area. These values were then used by the Coastal Panel in 2023 to develop community objectives. These community objectives were then used as one of the criteria to score adaptation options. Adaptation options which scored highest across six different criteria (effectiveness, feasibility, environmental, mana whenua, community objectives, and the Council's guiding principles) were then used to develop adaptation pathways for different assets.

Feedback from this consultation will be used by the Coastal Panel to refine the draft adaptation pathways into preferred adaptation pathways. These preferred adaptation pathways will go out for community consultation again before being taken to the Council for a decision.

Engagement and communication approaches

Approach	Date	People reached
Release of third Coastal Panel video, and asset management video	Pre-engagement	320 combined views
Letters to private property owners around the harbour who may be at risk of coastal hazards over the short-term.	Pre-engagement	95 properties
Meetings with Orion and the Lyttelton Port Company to share information about the upcoming engagement	Pre-engagement	
Community Board briefing	9 October	
Newsline story	16 October	968 views
Social media posts in local group pages	16 October	20 interactions
Geo-targeted Facebook, Instagram, and LinkedIn ads	16 October to 26 November	83,338 impressions, 1,053 interactions
Geo-targeted Google Performance Max ads	20 October to 26 November	93,579 impressions, 3,451 clicks
Initial Coastal Futures newsletters to subscribers	16 October	214 unique opens, 31 people clicked links
Direct email to community groups and other stakeholders	17 October	101 people/groups
Stand and presence at Orton Bradley Fair	22 October	~ 20 conversations, 8 pieces of feedback
Flyers dropped in letterboxes	Week starting 30 October	1,880 letterboxes plus 300 distributed to shops, libraries, and other businesses
Follow up direct email to community groups	6 November	8 community groups
'How we move around the harbour' webpage	Live from 10 November	84 visits during engagement
Location-specific webinars (and Facebook 'events' for each one, including boosting)	8, 15 and 21 November	Rāpaki & Allandale: 16 Teddington & Charteris Bay: 22 Purau & Koukourarata: 16
Follow up Coastal Futures newsletters to subscribers	16 November	233 unique opens, 56 people clicked links
Charteris Bay Residents Association meeting	10 November	30 attendees
Three newspaper articles in the Press and the Bay Harbour News	18 October and 4 November	
Let's Talk webpage	Throughout engagement	2,734 visits from 1,329 unique users
Brochures in Lyttelton and Diamond Harbour libraries	Throughout engagement	
Engagement with schools, including dropping brochures in	Continued	

Submissions

We received 58 submissions. These submissions include:

- 36 individual residents
- Six group submissions from Te Mana Ora, Orion, the Lyttelton Port Company, Governors Bay School (GBS), Lyttelton Primary School, and the Charteris Bay Residents Incorporated.
- Feedback from 16+ people collected in a more informal manner such as through the Orton Bradley Fair, the Charteris Bay Residents Association meeting, and feedback sent via email.

Overarching themes

Theme	Specific issues raised	Response
Support for the CHAP programme and Coastal Panel process	Support for undertaking long-term planning so that we know what we'll do when we see signals and triggers in the future.	This feedback will be shared with the Coastal Panel and other relevant stakeholders.
	<p>Te Mana Ora commends the Council for their thorough and inclusive process in considering and adaptation planning for sea level rise. Adaptation planning, when it engages with the needs and aspirations of impacted communities, can enable, and support equitable health and wellbeing outcomes.</p> <p>Te Mana Ora encourages the Council to continue to prioritise this future-focused work, as it is an essential process for ensuring community voice is centred in our response to climate change, and it will enable more equitable health and wellbeing outcomes for communities.</p>	

	<p>Lyttelton Port Company (LPC) support the Council’s proactive response to the challenge that climate change presents, especially regarding rising sea levels. LPC agrees that adaptation planning is imperative to safeguard and prepare communities for future challenges they may face.</p>	
	<p>Orion supports the early identification of areas of potential risk for sea level rise and the preparation of options to address those risks.</p>	
<p>Concern regarding sea level rise explanations and projections</p>	<p>Concern that sea level rise was being attributed to climate change, and the belief that the Council should adopt a less conservative approach (i.e. plan for less extreme sea-level rise scenarios).</p>	<p>The Council takes direction on sea level rise projections and how to plan for them from the Intergovernmental Panel on Climate Change (IPCC) and the Ministry for the Environment (MfE), respectively.</p> <p>The IPCC is the United Nations body for assessing the science related to climate change. The IPCC Sixth Assessment Report (AR6) is internationally agreed and provides the most comprehensive summary of the state of scientific, technical, and socio-economic knowledge on climate change, its impacts and future risks, and options for adaptation and mitigation. It is a key source of scientific information and technical guidance to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. As a member country of the IPCC and the UNFCCC and a signatory of the Paris Agreement, New Zealand takes direction from the scientific and technical outputs of the IPCC.</p> <p>The most recent MfE interim guidance on the use of new sea level rise projections recommends using five shared socioeconomic pathway (SSP) scenarios for sea level rise projections, including the upper-range scenario SSP5-8.5, and is upper likely range of 8.5H+. Where available, data on local vertical land movement should also be considered.</p>

	<p>Concern of maladaptation for future generations if we spend money now, or base work off science predictions that may not eventuate.</p>	<p>The Dynamic Adaptive Policy Pathway (DAPP) planning approach which we are taking has a strong focus on adaptability which allows us to plan around uncertainty by focusing on pre-determined signals, triggers and thresholds, instead of timeframes.</p> <p>Trigger points allow us to take action in response to signals to prevent an unacceptable threshold being reached. This approach reduces the risk of maladaptation by ensuring the most appropriate action is taken at the right time, and helps to effectively allocate resources. At each stage of the adaptation pathway, options are reassessed as new information and technology becomes known. This approach keeps the pathway flexible and avoids path dependencies where possible.</p> <p>To find out more about the DAPP planning approach, check out our fact sheet.</p>
	<p>There is a lack of consideration for other hazards, such as a rupture of the alpine fault.</p> <p>Other forces such as the tectonic movements influence the rate of sea level rise, and these should be factored in.</p>	<p>Central government direction and the Council’s resource levels currently limit the scope of the Council’s Coastal Hazards Adaptation Planning programme to coastal flooding, coastal erosion and rising groundwater.</p> <p>A recent study by GNS Science has shown how local rates of vertical land movement (post-Canterbury Earthquake Sequence) could impact the relative rates of sea level rise that we experience (i.e. if land is sinking and sea levels are rising, we will start to see the impacts of sea level rise sooner than expected, and conversely if the land is rising).</p> <p>This new data is being considered by the Specialist and Technical Advisory Group and the Coastal Panel throughout this process.</p>
<p>Worries about property values, insurance premiums and availability, and the Council’s role</p>	<p>Concern that the Council’s hazard information will impact on insurance premiums and availability.</p> <p>Questions regarding the Council’s role in supporting residents who have recently bought or built in hazard prone areas.</p>	<p>The Council’s role is to develop and implement plans, policies and regulations for the identification and management of coastal hazards, and facilitate the building of resilience and adaptive capacity within communities, including providing information about known risks posed by coastal hazards.</p>

		<p>It is the role of insurers to price risk. If updated hazard data shows a change in risk, insurers could use this information to inform their assessment of risk and how they price it.</p> <p>Because insurance typically provides cover for sudden and unforeseen events, it is possible that some insurers will reduce or withdraw cover from storm, flood, and other climate change related events if these become more frequent and extreme over time.</p> <p>The private asset owner's role is to be aware of hazard risks and their responsibility for managing them.</p> <p>For more information on the roles and responsibilities of the Council, insurance companies and individuals, see our Insurance and Climate Change factsheet and our Coastal Adaptation Framework.</p>
<p>Concern about the implementation of options, and prioritisation across the district</p>	<p>There is a need to start collecting money now, to fund future adaptation actions. There will also need to be a willingness to spend money in the future, if climate change adaptation is seen as a priority.</p> <p>To date, there has been a focus on Whakaraupō Lyttelton Harbour and Koukourarata Port Levy, while there are many other places facing the same issues.</p> <p>Working with signals, triggers, and thresholds is a good idea to stage implementation of work. It will be important to consider the risk of multiple triggers being hit at the same time across the district, and how work would be managed efficiently and equitably.</p> <p>Te Mana Ora notes that the Council will need to carefully consider how to ensure climate change adaptation actions are managed in an equitable</p>	<p>During the next stage of work, the Coastal Panel will undertake a prioritisation exercise to determine which adaptation pathways are most urgent to implement and/or have the greatest impact.</p> <p>In most instances, adaptation actions are not necessary in the near-term, and it is intended that adaptation plans will have been completed across the district before this. This means that a holistic view across the district can be taken to help the Council decide which pathways to implement at which time.</p> <p>The Council's Long Term Plan consultation document contains proposals to accelerate adaptation planning and establish a climate resilience fund which, if progressed, would start collecting funds now to help pay for adaptation actions in the future.</p>

	<p>way and ensure that the limited budget and resources for adaptation pathways are distributed equitable across communities throughout Ōtautahi Christchurch.</p>	
<p>Balancing different values</p>	<p>Several individual submitters support working with nature in principle, but also want to maintain road access to and through different communities.</p>	<p>This feedback will be taken to the Coastal Panel who will determine how different values may be balanced to achieve the best outcome.</p> <p>More detailed, preferred pathways will be consulted on again with the wider community before being taken to the Council for a decision.</p>
	<p>Broadly, Te Mana Ora supports adaption pathways that work with nature. We recommend that the Council prioritise adaptation investment and actions that work with nature as much as possible to avoid expensive adaptation projects that are either ineffective or maladaptive.</p>	
<p>A want for more details on options and pathways</p>	<p>Detailed possibilities are needed in order for people to be able to provide comprehensive feedback.</p>	<p>The purpose of this consultation was to get a steer on whether the Coastal Panel are on the right track with the draft adaptation pathways so far. While this meant that the pathways did not have a high level of detail, we thought this would be a meaningful time for the wider community to provide feedback early in the process.</p> <p>The Specialist and Technical Advisory Group and Coastal Panel are now working on adding more detail to the pathways that have been signalled to be favourable to date.</p> <p>Once this detail has been developed and preferred pathways have been signalled, the wider community will be consulted with again before taking recommendations to the Council for a decision.</p>

Draft adaptation pathways

The following tables highlight the positions of groups and individuals on different options in the draft adaptation pathways, described in submissions. The brackets indicate the number of submissions which indicated this view, and whether any of them were from group submissions.

In many cases, submissions focussed on more general feedback as discussed above, rather than preference between different options in draft adaptation pathways. Many submitters also only provided feedback on draft pathways in one or two of the Priority Adaptation Locations. This combination means that in many cases there is not a clear distinction on which options might be preferred by the wider community.

Given that feedback was sought in an 'open text' format, it was also sometimes hard to interpret which option people preferred based on language used. For example, when looking at the draft pathway for the Allandale Domain, someone preferred to 'work with nature'. The two options described in the draft pathway were 'let nature take its course' or more 'active naturalisation', so it was not clear which they preferred.

Rāpaki	
Wastewater infrastructure	Move (1 & Te Mana Ora)
Gallipoli Wharf	
Beach access	Close (1)
Car parking area	Move (1)

Some summarised feedback:

Te Mana Ora - Prioritise moving the wastewater infrastructure to protect the health of the community and environment.

Allandale				
Landfill	Remove (5 & Te Mana Ora)			
Governors Bay foreshore track	Maintain, then close (3) , or work with nature (1)	Move (1 & GBS)	Flood-proof or move, just don't close (2)	Flood-proof and protect (1)
Governors Bay – Teddington Road	Maintain, then flood-proof and protect (3 & GBS)	Move (2 & GBS) , or work with nature (1)		
Hall	Build a new hall in a new location (3) Have a covered outdoor area and build a new hall in a new location (1)	Remove (1)	Work with nature (1)	
Domain	Let nature take its course (3)	Active naturalisation (1)	Work with nature (1)	

Some summarised feedback:

Governors Bay School - Moving the foreshore track is the preference. It would be cost effective and ensures that the track remains a part of the community. Need to consider the cost, who pays, access to the jetty, maintaining harbour views, potential harmful environmental impacts and how long construction may take. Protection is unfavourable due to delaying the inevitable. Closing it is unacceptable.

Individual submitter - I think the foreshore track should be maintained as it is with some drainage management. If it becomes too wet to use most of the time, it should be allowed to revert to be part of the sea. Sad as this is, there is no holding back the tide.

Individual submitter - This was a major draw why my family moved to this area. We often came here with our dog when we lived in the city and dreamed about moving and found a property connecting to it. It's important for our kids to get to and from school. I would flood-proof and protect as long as humanly possible. If it were ever to be closed, I would hope the footpaths could be extended from the reserve to Governors Bay to connect the two communities.

Individual submitter - I enjoy using this walkway, but when considering wider issues like access to properties, maintaining roads, protecting pipes etc, I can't justify the cost of maintaining or moving the walkway. I would support continuing to use it as it is until it is no longer safe to use, then closing it.

Te Mana Ora - Prioritise removing the landfill to avoid contamination which poses risks to public health and mahinga kai. While the landfill and its current defences could be maintained for 10-20 years, waiting to act will mean that the adaptation pathways will become harder and more expensive.

Individual submitter - Armouring the landfill is completely unacceptable. Despite the high cost to remove it, the potential environmental and human health effects of contamination in the harbour is unacceptable. As the armouring won't stop groundwater intrusion, there is no way to prevent contamination from the landfill from leaching into the harbour. Why would this ever be considered a viable option? In addition, the ongoing maintenance costs of the armouring may make it the less affordable option anyway.

Individual submitter - I think a small amount of work will need to be done to support the naturalisation of the Domain, but do not feel a great deal of landscaping or planting is needed at this stage as nature will quickly take its course once allowed to. In addition, leaving the option open for future restoration/planting work would create an opportunity for the community to come together to develop a plan and work towards a goal (like the Governors Bay Jetty), resulting in a lot more community ownership for and pride in the public resource.

Individual submitter - I do like the idea of returning to the original ecosystem in the Domain and along the landfill area. Is a raised boardwalk through a natural wetland an option? I've been on DOC maintained ones in the north island that were lovely with lots of bird life. The adjoining private property is currently for sale.

Teddington			
Road	Flood-proof (4)	Move (2)	Upgrade other roads (1)

Some summarised feedback:

Lyttelton Port Company - At this point in time LPC does not have a firm preference between 'holding the line' or 'working with nature'. LPC understands that it will become more expensive and harder to adapt as the effects of coastal erosion become more severe. However, at this stage LPC seeks for the adaption planning to account for the importance of this alternative freight corridor.

Individual submitter - I ultimately prefer moving the road to higher ground. Both options appear to have significant initial and ongoing costs and will greatly affect local residents, but flood proofing will have significantly more ecological effects.

Individual submitter - Maintaining is the obvious starting point. Next, there could be some other options. How important is it to have a complete ring road inside the Harbour? I suspect that the vast majority of trips start or finish in Christchurch. For that purpose, Gebbies Pass can be used to get from Christchurch to the south side of the Harbour - particularly when towing a trailer or when Dyers Pass is icy. If some of the \$170m it might take to implement these options was used to upgrade Gebbies Pass and the roads from Motukarara to Christchurch, the extra travel time may be insignificant. Could another option be using the Summit Road to bypass some of the Teddington flood prone area?

Charteris Bay			
Marine Drive	Flood-proof and protect (10 + Charteris Bay Residents Inc.)	Move (2)	Alternative/complimentary access methods (ferries) (1), and investigate extending the Summit Road (1)
Wastewater and water supply pipes	Protect (6)	Move (1 & Te Mana Ora)	
Boat ramp	Flood-proof and protect (7)	Protect at least one between Charteris Bay and Purau (3)	Close (1)

Some summarised feedback:

Individual submitter – Protecting the road is the obvious choice given there is existing rock revetment. Re-routing via Andersons Road is not favoured.

Individual submitter – There is a willingness to live with hazards/impacts and not be able to use the roads all the time for example. May be happy to use ferries more in the future as it becomes costly and environmentally damaging to retain roads. People will need to learn to live differently in the future.

Individual submitter - If the Charteris Bay boat ramp isn't solidified, the Purau one must be. There must be at least one on this side of the Harbour.

Charteris Bay Residents Inc. - The existing Marine Drive provides access to scores of properties on the hillside above the road. If Marine Drive was not maintained and protected these properties would be inaccessible as they are dependent on Marine Drive for access.

The residents therefore believe that maintaining the Marine Drive roadway is the best option for the area, with many accepting that in unusual high tides there may be some issues with access.

Te Mana Ora - Recommends that the Council prioritise moving the wastewater and water supply pipes inland, away from coastal hazards. Damage to wastewater infrastructure can cause significant health risks to the population that engage in recreational water activities. Wastewater can also cause damage to the environment, impacting mahinga kai and the cultural health and wellbeing of mana whenua.

Purau			
Road	Work with nature, but concern about maintaining access (3) Flood-proof or move, but maintain access (1)	Food-proof and protect (2) Flood-proof and protect in the first instance, moving will be inevitable in the future (1)	Move (1)
Jetty & boat ramp	Remove or close (3)	Protect at least one between Charteris Bay and Purau (3) Raise and protect (2)	Build a new jetty and protect the ramp (1)
Domain	Let nature take its course (5)		
Public toilet	New toilet further inland (2 & Te Mana Ora)	Relocatable toilet (3)	Remove (2)

Some summarised feedback:

Individual submitter - Prefers to work with nature but is worried about access, wouldn't want to have to take ferry but might be able to get used to it – needs time to think it through. Don't want to retreat as it's a retirement property. Would be keen to stay but wants to know implications for services e.g. more septic tanks.

Individual submitter - Not necessarily against moving the road in principle, but it would depend on where the new road was placed.

Individual submitter - When needed, the road could be raised and still allow water to flow underneath it in the same way McCormicks Bay has successfully allowed mudflats to exist on both sides of the road and still connect communities.

Individual submitter - Letting nature take its course with the domain is the way to go. This could even be a community project given planning and funding. This communities of Diamond Harbour and Purau are well capable of such a project.

Koukourarata		
Roads	Flood-proof in existing alignment (2)	Move (1)
Wharf	Build new (2)	
Public toilet	New toilet inland (1 & Te Mana Ora)	Relocatable toilet on the reserve (1)

Some summarised feedback:

Individual submitter – The road at the head of the bay is priority. Maintaining existing alignments is favourable as relocation will be very expensive and disruptive but may be needed in the longer term.

Individual submitter – A new toilet in a new location would be favourable, if accepted by rūnanga. Let shoreline where the current toilet is erode/nature take its course.

Individual submitter - Building a new wharf will future proof this key piece of infrastructure. The current wharf is substandard and requires a lot of maintenance.