

CONSULTATION ANALYSIS:

ISSUES AND OPTIONS PAPER FOR THE COASTAL HAZARDS DISTRICT PLAN CHANGE

Introduction

Engagement on the Coastal Adaptation Framework, and the Issues and Options Paper for the Coastal Hazards Plan Change initially ran for five weeks, from 8 October – 15 November. However, following feedback from the community the engagement period was extended a further three weeks until 6 December 2021 to give groups and individuals more time to consider their feedback.

Engagement and communication tactics

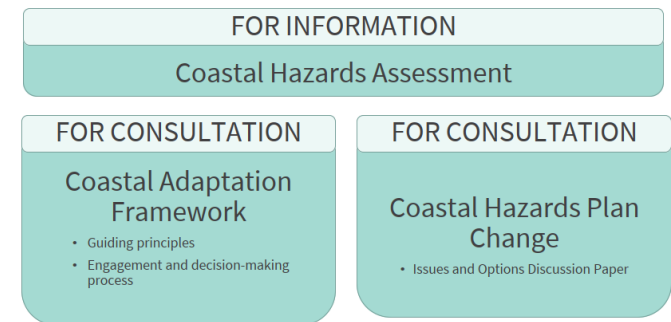
Engagement on the Coastal Adaptation Framework and the Issues and Options Paper for the Coastal Hazards Plan Change was wrapped up into a wider Coastal Hazards Conversation which included the release, for information, of an updated Coastal Hazards Assessment.

To introduce the coastal hazards conversation, we sent out an email to more than 200 stakeholders, groups and individuals when the Coastal Hazards Assessment was released. The release of the Assessment was timed to coincide with the release of the Coastal Adaptation Framework and the Issues and Options Paper on the Urban Development and Transport Committee agenda.

On 8 October, when engagement launched for the Coastal Adaptation Framework and the Issues and Options Paper, a newsletter was sent out to the same database and a follow-up email was then sent to specific community groups with a particular interest in coastal hazards.

In the lead-up and during the engagement period we held more than 40 briefings, meetings and drop-ins, reaching more than 450 people. Meetings attended by the project group but organised by community groups for their residents and members were particularly well-attended, and we would like to acknowledge and thank those groups for the invitations to attend.

Over the course of the engagement period we promoted the coastal conversation more than 20 times via social media. Our Facebook posts reached more than 59,000 people, with 1,716 Active responses (likes, shares and comments). We also had six stories on Newsline, as well as articles in The Press, the Akaroa Mail, the Star, Bay Harbour News, and an interview on Radio New Zealand.



Submissions

We received 101 submissions on the Coastal Adaptation Framework and 90 submissions on the Issues and Options Paper. These totals include:

- 25 pro formas organised by the Waimairi Beach Residents' Association which provided feedback both the Coastal Adaptation Framework and the Issues and Options Paper.
- 10 pro formas organised by the North Beach Residents Association which provided feedback on both the Coastal Adaptation Framework and the Issues and Options Paper.
- 7 submissions endorsing the Southshore Residents' Association which provided feedback on both the Coastal Adaptation Framework and the Issues and Options Paper.

The majority of feedback was from residents in coastal communities – in particular, from residents living in the Pegasus Open Coast area (Brooklands, Waimairi, North Beach, New Brighton, South New Brighton and Southshore).

With the Coastal Adaptation Framework we also saw a high number of submissions from children and young people – including students from the University of Canterbury, and a joint submission from students from Banks Avenue School, Chisnallwood Intermediate, Governors Bay School, Haeata Community Campus, and Lyttelton Primary School.

We heard from the Waitai Coastal-Burwood and Waikura Linwood-Central-Heathcote Community Board, and the following organisations, residents' associations and community networks:

- Christchurch Coastal Residents United (CCRU)
- Avon Heathcote Ihutai Estuary Trust
- South Brighton Residents Association (SBRA)
- Waimairi Beach Residents Association (WBRA)
- North Beach Residents Association (NBRA)
- Southshore Residents Association (SSRA)
- New Brighton Pier and Foreshore Society
- Brighton Observatory of Environment and Economics (BOEE)
- Flourish Kia Puawai

- Orion
- Lyttelton Port Company
- Boffa Miskell

Overarching themes across both engagements

Across both engagements there were some common themes around process and expectations.

There was a strong feedback from a number of submitters in the Pegasus Open Coast area that the period of engagement was too short, and there was insufficient time to consider all the information and to make informed comments. This was a particular theme in the feedback from residents' associations, who felt that they did not have enough time to canvas the views of their residents properly. In response to this feedback we extended the engagement period for a further three weeks, at the end of which time the residents' associations we heard from (Waimairi, North Beach and Southshore) either submitted pro formas or had feedback specifically endorsing their submissions. This would suggest that, over the eight week period, they had been able to complete, at least to some degree, wider engagement with their local residents.

Another overarching theme across both engagements was an issue of trust and confidence in the Council. Again, this feedback was almost exclusively from submitters in the Pegasus Open Coast area. Submitters referenced previous processes and experiences with the Council as undermining trust in the current process. Some submitters specifically mentioned their concern at slow progress on the project to address earthquake-related issues to the estuary edge in Southshore and South New Brighton. In addition, the inability to review and challenge the technical information, and the lack of community involvement in the early planning stages of both documents were also cited as reasons for mistrust in the current process.

“Community involvement has been denied and models and data have not been made available for review, all of which leads to the familiar closed-door scenario and feelings of mistrust with Council.”

A further theme across both engagements was the perception that coastal communities have been unfairly singled out and that other areas of the city are not given as much scrutiny or have as many restrictions.

“Let’s be honest, Southshore has been mercilessly spotlighted, over-analysed, over-consulted and at times over-regulated. It would be fair to say that many in Southshore have consultation fatigue.”

Coastal Hazards Plan Change: submissions analysis and proposed provisional responses

Engagement process and other overarching issues

Issue	Comment	Provisional Response
<p>Insufficient time for community engagement. Request pause in process.</p>	<p>Some submitters argued that the engagement period has been too short for communities to process the Coastal Hazards Plan Change Issues and options paper given the complexities and significance of this programme of work (David East, Kim Money, Brian Sandle, Rachel Puentener, Stewart McNeice, Megan Roulston, Marie Graham, Nick Yuki, Jan and Tim Sintes, SSRA, Brighton Observatory of Environment and Economics (BOEE), CCRU and Federated Farmers New Zealand (FFNZ)).</p> <p>The 34 pro forma submissions from North Beach and Waimairi Beach Residents Association members also sought a longer engagement period.</p> <p>Some submitters acknowledged the extension to the timeline but some felt even longer was required.</p> <p>Josiah Thompson sought additional time to consult with communities on what they consider an acceptable risk.</p> <p>However, some submitters acknowledged the value of Council engaging early in the process of developing the Coastal Adaptation Framework and noted their appreciation for what they perceived as a new approach (Meg Roulston, BOEE, Rachel Puentener).</p>	<p>The Council acknowledge the concerns raised regarding the length of time for community consultation on the issues and options paper (and technical information).</p> <p>An initial five week engagement phase of 8 October – 15 November was extended to an eight week engagement phase, which closed on 6 December. It is acknowledged some consider this extension should have been longer.</p> <p>There will be further opportunities for the community to provide input into the plan change prior to notification as well as after formal notification of the plan change.</p> <p>Looking ahead, the Coastal Hazards Plan Change needs to align with other Plan Changes, notably the NPS-UD Intensification PC, the risk being that there are multiple conversations about related issues, including the appropriateness of intensification in areas affected by coastal hazards.</p>

	<p>BOEE questioned why this work is being undertaken now given the reform.</p> <p>SSRA requested a pause in engagement until reports from independent experts are commissioned.</p> <p>Some submitters request that Council resolve process/technical concerns first before going ahead with the plan change. “Until the above submission comments with requested actions and our coastal communities have been empowered and resourced to engage our own independent experts to work with CCC’s chosen experts and to also be able to peer review any reports and technical data being used by Council in these processes, then this request to choose one of your options is premature and unacceptable”. (Kim Money).</p>	
Council need to raise awareness of accreting beach	One submitter comments that public awareness should be raised regarding the coastline south of the Waimakariri River being an accreting beach (Kim Money).	<p>Section 2.7 of the Tonkin & Taylor report provides information on sediment supply. This is publically available and was identified in the community engagement for the CAF and Issues and Options.</p> <p>In the next stages of engagement on the plan change, consideration will be given to how this is communicated.</p>
Community well-being	One submitter considers “our communities well-being needs to be top priority through this process” (Kim Money).	Staff recognise the importance of supporting communities and their well-being, particularly given the current COVID environment. This will be considered in planning for engagement.

		With regard to the impacts of regulation on communities, the Council has and will continue to consider the social effects of the preferred option and alternatives to it as part of a s32 assessment.
Co-creation	The SSRA and FFNZ suggest a co-creation/co-design approach. SSRA suggest that after the submissions are received an interim process of community appointed experts and CCC gather to look at the summary of submissions and find a middle ground to suggest a plan change document that satisfies legal requirements. FFNZ consider that co-design approach with all community parties will help create an integrated multi-faceted approach that addresses specific concerns.	<p>Council staff welcome further feedback during the course of preparing the provisions.</p> <p>While a co-design approach can have merit, there is a diversity of interested people and organisations with different views that may not be adequately reflected in a panel of experts. Even if a middle-ground could be found, the District Plan provisions will need to conform with the RMA and give effect to the New Zealand Coastal Policy Statement (NZCPS) and Canterbury Regional Policy Statement (CRPS).</p> <p>There are opportunities for a more collaborative approach through the Coastal Hazards Adaptation Planning Programme.</p>
Already lack of trust in Council – Southshore earthquake legacy	Some submitters commented that there is already a lack of community trust in Council due to the handling of the Southshore Estuary Edge Earthquake Repair as well as the non-functioning stormwater system (Kim Money, Megan Roulston, Jan Burney, Marie Graham, Nick Yuki, Andrew Evamy, Jan and Tim Sintes, and New Brighton Peer & Foreshore Society).	<p>The approach to the plan change is to engage early on a preferred direction and thereafter, to provide opportunities for feedback on a draft before the statutory process. Through this process, we will seek to build confidence and help communities understand the rationale for the plan change.</p> <p>On 9 May 2019 Council [CNCL/2019/00074]:</p> <p>3. Agrees to split the Regeneration Strategy project into two projects:</p>

		<p>a. Earthquake legacy repairs. b. An adaptation strategy.</p> <p>This decision was informed by feedback from the Southshore and South New Brighton communities. Accordingly, Council staff have progressed these projects separately.</p> <p>On 12 November 2020 Council [CNCL/2020/00138] resolved to allocate funding of \$10.5m in the 2021-31 Long Term Plan for the completion of earthquake legacy works “subject to design and consenting”.</p> <p>This project is continuing to be driven by Council.</p> <p>It is an unavoidable reality that significant and lengthy process work is required before on the ground delivery can occur. The consenting steps are statutory and are therefore required of Council. These steps were clearly outlined to the Southshore Residents Association AGM in late 2020.</p> <ul style="list-style-type: none">- Funding of \$12.5m was allocated in the 2021-31 long Term Plan.- A dedicated Project Manager has been appointed and Jacobs have been commissioned to deliver Preliminary Design.- The Resource Consent is on track to be submitted by the end of June 2022.- Allowing for a year for the Resource Consent it will be followed by Detailed Design with a planned start on site for the main works in January 2024.
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		<ul style="list-style-type: none"> - During Preliminary Design Council will be identifying opportunities for early works that can be undertaken prior to receiving full Resource Consent. <p>Management of stormwater is of high priority for Council. In low-lying parts of the city adjacent to the coastline and rivers there are significant geographic challenges that require additional monitoring and support from Council.</p> <p>Southshore has a well-maintained storm-water infrastructure that copes well until there is a combination of high tide and heavy rain. In these weather events, storm-water ponds on streets because there is little gradient for water to channel towards drainage systems. Temporary street flooding is a practical and preferable design solution to water pooling on private properties and is a common practice in cities worldwide.</p> <p>These challenges are not confined to Southshore and are an early indication of the challenges ahead as sea levels rise.</p>
<p>Southshore (SS) over-consulted and overregulated</p>	<p>Some submitters consider Southshore has been “mercilessly spotlighted, over-analysed, over-consulted and at times over-regulated” (David East, Jan Burney, Andrew Evamy, Jan & Tim Sintes, SouthShore Residents Association (SSRA)).</p>	<p>It is acknowledged that there is consultation/planning fatigue experienced by some in the Southshore community.</p> <p>The Council wants to ensure that there is an opportunity for those affected by proposed changes to have their say</p>

		<p>and the approach for the plan change is to engage early, drawing on lessons from the District Plan.</p> <p>With regard to concerns of over-regulation, there is a statutory requirement to address coastal hazards (and other natural hazards) in the District Plan.</p> <p>The District Plan addresses a range of natural hazards that are distributed across the city, not just the coastal communities. Note a map is being developed that sets out the hazard controls across the district.</p>
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Impacts of regulation

Issue	Comment	Provisional Response
Communities constrained	A number of submitters raise concern that changes to the District plan will unduly restrict development which will impact on coastal communities. (David East, Kim Money, Waimairi Beach RA, North Beach RA, Rachel Puentener, Diane Douglas, Megan Roulston, Marie Graham, Nick Yuki, Andrew Evamy, Jan and Tim Sintes, SouthShore residents association (SSRA), Kerrie Kenneally, Karina Hay, Kathryn Snook, Marion Smart, and Waitai Coastal-Burwood Community Board).	<p>Council staff are recommending a Risk Based approach, which endeavours to provide flexibility for land use and development to occur where it is safe to do so i.e. the risks are appropriately managed.</p> <p>The plan change will need to give effect to NZCPS and Canterbury RPS, which requires the avoidance of harm from coastal hazards. Therefore, a restrictive approach may be necessary, namely in areas of high risk.</p> <p>Through the evaluation of the preferred option and alternatives to it, Council will consider the benefits and</p>

		costs and weighing these up to determine their effectiveness and efficiency.
Insurance concerns	One submitter requests the community is given access to minutes of any meetings between Council and insurance (Kim Money).	Council will consider this further as a request under the Local Government Official Information and Meetings Act.
Compensation	Some submitters query whether compensation will be provided if a change to the district plan devalues land and restricts development (Megan Roulston, Nick Yuki, Kathryn Snook, Marion Smart).	Further advice will be provided at a future date.

Technical report

Note that feedback was not sought on the Jacobs report during the engagement period.

Issue	Comment	Provisional Response
Need opportunity for public to scrutinise technical reports	Some submitters are concerned that the community has had no opportunity to ask questions, discuss and provide feedback on the technical reports from Jacobs and Tonkin + Taylor (Richard Dalman, North Beach RA, Kim Money, Rachel Puentener, CCRU and SSRA).	The Council has endeavoured to act in an open and collaborative manner in the development and publication of the CHA.
Requests peer review	One submitter considers it “is a reasonable expectation that potentially impacted residents and communities are given the opportunity to scrutinise the reports and the experts explain their science to those affected by it” (Richard Dalton). Some submitters (David East, Waimari Beach RA, North Beach RA, New Brighton Peer & Foreshore Society) request peer review/s of technical reports, the level of risk (David East) and testing of the modelling (David East and Waimari Beach RA).	With this front of mind, the methods, full technical report and peer reviewer comments are all available publicly as well as a public report, online portal, videos and accompanying fact sheets. MfE guidance acknowledges that there is unlikely to ever be complete agreement on the science. However, Council’s inclusion of multiple scenarios within the modelling allows for adaptive planning and recognises the inherent uncertainty in any modelling that estimate future climate conditions.

		<p>A peer review of the Jacobs report - Risk Based Coastal Hazard Analysis for Land-use Planning has been commissioned, and this will inform future refinement of the technical work.</p> <p>Comments and feedback on the Jacobs report are welcome during the process for the plan change and Council will continue to make the Jacobs report and any updates to it available.</p>
Concerns with assumptions	<p>Some submitters had concerns with the assumptions and modelling within the technical reports (Richard Dalman, David East, Waimari Beach RA, North Beach RA, Rachel Puentener, New Brighton Pier and Foreshore Society, Megan Roulston, Marie Graham, nick Yuki, Jan and Tim Sintes, SSRA, Karina Hay, Waitai Coastal-Burwood Community Board, Thomas Kulpe, Vic Allen, Marion Smart, CCRU and Josiah Thompson).</p> <p>Replace AEP/ARI as the basis of risk assessment (Thomas Kulpe).</p> <p>"Develop a common methodology for the flooding hazard - not a very specific one for coastal flooding. Each catchment has its own unique set of parameters that should be recognised " (Thomas Kulpe).</p> <p>Sand accretion from the Waimakariri River should be taken into account as it is likely to extend the time frame before this area becomes high risk. (Mike Currie).</p>	<p>There is further technical work being undertaken/refined. Issues raised in submissions will be taken into account.</p>
Concerns with modelling		<p>Following receipt of submissions there has been a quality assurance process undertaken by way of a review of the Jacobs report 'Risk Based Coastal Hazard Analysis for Land-use Planning report' 2021.</p> <p>Comments and feedback on the Jacobs report are welcome during the process for the plan change and Council will continue to make the Jacobs report and any updates to it available.</p> <p>Sand accretion has been addressed in the T+T report.</p>
Request map for entire city	<p>One submitter requested coastal hazards mapping be undertaken for the entire city to provide context (Kim Money).</p>	<p>City wide mapping</p> <p>Appears to be beneficial to clarify that there is risk from coastal hazards further inland, which was not re-modelled</p>

		<p>as part of this process. Council intends to achieve by adding a static map of the 2017 CHA coastal hazard risk to the inland area on the coastal hazards online portal.</p> <p>The extent of the area subject to the Coastal Hazards Plan Change is as mapped by Tonkin and Taylor and Jacobs. While coastal hazards extend further inland, the flooding is influenced to a greater extent by rainfall and river sources. Existing flooding overlays in the District Plan that apply to land to the west take account of sea level rise and Council is proposing a plan change to update the extent of flooding overlays that apply to other parts of the city.</p>
Stormwater issues resolved then undertake mapping	One submitter considers stormwater issues should be resolved prior to mapping being undertaken. They also consider that inadequate temporary stopbanks and earthquake damaged drains should not be included in future mapping as no permanent mitigation has been included (Kim Money).	There is further technical work being undertaken/refined. Issues raised in submissions will be taken into account.
Additional analysis	One submitter requests an economic analysis and a social wellbeing analysis (Brian Sandle).	Council staff will consider this further in the course of evaluating the benefits and costs of the preferred option and alternatives to it as part of a s32 assessment.

Options

Issue	Comment	Provisional Response
Views on the four options	<p>Thirty one submitters indicated a preference for one of the four options:</p> <ul style="list-style-type: none"> - 16 submitters preferred Option 1 - 9 submitters preferred Option 2 	The Risk Based Approach (Option1) remains the preferred option. The feedback does not demonstrate the alternatives are more appropriate and the evaluation to date demonstrates that option 1 appropriately avoids an

	<ul style="list-style-type: none"> - 6 submitters preferred Option 3 - 3 submitters preferred Option 4 <p>Two submitters indicated a preference for two options:</p> <ul style="list-style-type: none"> - Preference for Options 1 and 4 (Ian Burn) - Preference for Option 2 now and Option 1 in the future (Vic Allen) <p>Some submissions (including pro-formas) consider none of the four options are appropriate.</p> <p>Option 1 Risk-based approach</p> <p>Reasons for supporting option 1 include:</p> <ul style="list-style-type: none"> - The approach is commensurate with the level of risk posed by coastal hazards and allows for consideration of hazards on an individual/area basis (ECan, Mike Currie, FFNZ, Pat Pritchard, Lyttelton Port Company (LPC)) - “Trigger points make sense rather than set timelines however those trigger points need to be agreed rather than imposed” (Lynda Burdekin) - Staggered approach (Orion) <p>Reasons stated for not supporting option 1 include</p> <ul style="list-style-type: none"> - Option 1 too conservative (Richard Dalton, Eugenio Boidi, Pat McIntosh, Marion Smart) - Option 1 too permissive (Nick Reid, Simon Anderson) <p>Option 2 Do Minimum</p>	<p>increased risk of harm while continuing to enable people to maintain their well-being.</p> <p>Notwithstanding this, further development of the risk based approach will be undertaken drawing on issues raised in submissions and further technical work.</p> <p>With regards the risk of maladaptation (acting to early or too late) signalled by the submitters from the eastern suburbs the MfE Guidance adopted by the Council recommends the use of signals and triggers which are indicators of changes – such as a degree of sea level rise – that indicate when it is optimal to act. These triggers are intended to prevent maladaptation.</p>
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Reasons for supporting option 2 include:

- The extent and timing of sea level change remains uncertain (Harry Stronach)
- “Too many uncertainties at this stage to justify any major change... Option 2 initially, followed by Option 1 later.” (Vic Allen)
- “do minimum until the Coastal Adaptation Planning is completed” (Rachel Puentener)
- “I believe the existing district plan provisions are working in the right direction and already address the coastal hazards...As they are strict (particularly in the HFMA+ RUO) but not prohibitive rules, they prevent excessive additional risks while also allowing improvements to existing houses to create a safer and more resilient community.” (Eugenio Boidi)
- “I believe Option 2 is the most appropriate as this approach best achieves Council’s 2 stated objectives for the Plan Change as well as allow for specific mitigating circumstances relevant to individual sites...” (Richard Dalton)
- “This option enables a bolstering of the existing District Plan policies with the introduction of additional matters for discretion and practical methods that will – compared to all other options - have a far less onerous economic, social and mental health impact on land owners whose property is determined as high or medium risk.” (Marion Smart)

Option 3 Avoidance of risk across the District

Reasons for supporting option 3 include:

- “Where sea levels are going to rise do not allow new houses. Mitigate where possible as well as with the right planting.” (Joy McLeod).
- “I think the Southshore Spit Nature Reserve should be expanded through to Waimari Beach... I'd like to see option three adopted as well as a long term (200~300 years) plan to retreat human habitation from the Pegasus Bay coastline entirely.” (Paul Bagrie).
- “Risk-based approach relies on subjective risk analysis for individual plots. This would probably lead to those with the financial and time resources being able to develop land in more vulnerable areas. Sea level rise will affect all coastal areas so we must start to retreat and limit development in these areas NOW.” (Luci Trethewey).
- “Building homes and amenities in areas we know will be susceptible to coastal flooding and storms just does not make sense. 20 or 30 years is not enough of a design life to create new infrastructure in this vulnerable areas.” (Nick Reid)

Option 4 Avoidance of risk outside the urban area, and a risk based approach in the urban area

Reasons for supporting option 4 include:

- “It is not as beaucratic as some others like option 1. It gets the job done without fuss.” (Marette Wells)
- “Option 1 is too permissive and will allow large areas to go to developers. Option 4 is in fact the most mature risk-based approach proposed. While the commentary in Option 1 sounds good, it is only a minor improvement on what we currently have, and allows for mass development in coastal

Through preparation of the plan change and further technical work, staff will seek to address the issues raised by ECan of alignment with provisions for managing rainfall/ river flooding, as well as the activity status for different activities.

	<p>hazard zones. Option 4 is a better step, in the right direction to protect communities.” (DC)</p> <p>ECan suggest that “CCC considers reviewing the event frequencies underpinning the four hazard categories to better align with the values used for flooding in the CRPS. We consider that this would better give effect to CRPS Policies 11.3.1 and 11.3.2, and align more closely with the approach taken to freshwater flooding.” ECan also comment they “agree with the general approach taken in Table 2 on Page 9, which indicates potential activity status by risk category. However, we suggest CCC considers raising several of the activity statuses for activities, in particular:</p> <ul style="list-style-type: none"> • We consider an enabling approach is appropriate for the upgrading and maintenance of critical infrastructure in the Very Low and Low risk categories, however a higher level of activity status may be more appropriate for new critical infrastructure in the Very Low and Low risk categories. • Consider using a ‘Restrictive’ approach to new subdivision for housing in the Very Low and Low risk categories. • Consider raising the activity status for new hazard sensitive activities in the Very Low and Low risk categories (for example new dwellings-conventional, health & care facilities, education facilities).” <p>Some submitters (Megan Roulston, Nick Yuki, Richard Griffiths, SSRA, BOEE) comment that coastal hazards are a city wide issue. “River and rainfall dynamics will be affected by climate change through increased precipitation and storm events. In coastal areas the flooding will be affected by sea level rise and erosion will be affected by storm events. Both river and coastal flooding/erosion need to be planned for” (Megan Roulston, Nick Yuki). “The southshore spit and dune system is the most economic and cost effective defence against</p>	<p>The existing provisions for managing the risk of flooding elsewhere in the City take account of sea level rise. In any case, Council is proposing a plan change to update the extent of flooding overlays over other parts of the City and changes to rules to address issues arising.</p> <p>Through preparing plan changes on coastal hazards, and other flooding overlays in parallel, we are looking at alignment/ consistency in approach and assumptions.</p> <p>Staff have been drawing on guidance from the Ministry for the Environment and Department of Conservation in interpretation of the NZCPS as well as seeking legal advice.</p> <p>The Council is initiating the plan change in recognition that there are not sufficient controls to appropriately manage subdivision, use and development and the risks associated</p>
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<p>storm surge inundation to low lying areas of Christchurch around the Avon and Heathcote rivers and estuary. Flooding issues arise from the entirety of greater christchurch stormwater entering these rivers so thr (sic) entire system must be considered (sic) as a whole. Coastal areas issues cannot be separated from greater christchurch.” (Richard Griffiths). “Climate change will give harsher storms and pluvial flooding across Christchurch, beyond the coastal hazard zone. Hence we must be talking about specifically coastal hazards” (BOEE). “Christchurch is a low-lying city, and it is evident SLR and climate change will affect the ENTIRE city... where is the mapping indicating the hazards of SLR and climate change city-wide? This only further perpetuates the view of those in the unmapped grey areas that they will be unaffected. Residents from other areas are being asked to weigh in with their views of the coastal area without the contextual information on how the whole city might be affected.” (SSRA)</p> <p>Some submitters consider that there should be no change to current rules.</p> <p>The New Brighton Peer & Foreshore Society (Chair Stewart McNeice) consider the New Zealand Coastal Policy Statement allows for a greater scope of options than has been presented to the community by the Council.</p> <p>Some submitters requested that the earthquake legacy issues (such as the separate estuary edge erosion and flood protection works) be resolved prior to seeking a plan change. Concerns centred around the lead-in time for the erosion and flood protection works to be completed and the impact these perceived delays have had on trust between Council and communities.</p>	<p>with coastal hazards. If it is delayed until after legacy issues are resolved, there is a risk of subdivision, use and development being enabled without appropriate controls.</p> <p>Reference has been made in the submission by LPC to a staged approach allowing time for review of the Regional Policy Statement and Regional Coastal Environment Plan. While this is an option, this would cause further delay to the management of risks and ultimately, the regional planning framework will need to give effect to existing direction in the New Zealand Coastal Policy Statement. The direction in the NZCPS provides confidence of how the City and Regional Councils are to manage the risk of coastal hazards in any case.</p> <p>Council staff will consider this further in the course of evaluating the benefits and costs of the preferred option and alternatives to it as part of a s32 assessment.</p>
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The SSRA also raised equity issues where some parts of the city already have protection works but others do not.

One submitter (Ian Burn) raised concern that “ under option 1 Council will face pressure and legal challenge from a small number of well-financed groups who will push for resource use which is not in the collective best interest, but which Council's will be unable to to (sic) fight due to the legal costs of doing so. In this context we believe that option 4 will make it harder for such groups to pressure Council in non-urban areas, while retaining the rights of smaller operators to make reasonable changes to their resource use where they already have buildings on property. This comes at the cost however of people wanting to make small reasonable changes to resources on properties in currently non-urban areas which would otherwise have been allowed under 1.”

LPC “recommends considering whether the timing is appropriate given other policy and planning instruments (e.g. Regional Coastal Environment Plan and the Resource Management Act) that are currently under review which may influence district planning processes.” In addition LPC comments that should “Option 1 be taken forward, the risk layers utilised need to be clearly defined and any ambiguity or inaccuracy removed. For example, the Coastal Erosion layers show the Port as not containing erosion protection along the entire border and therefore being subject to erosion risk. However, the entire border of LPC’s Port area is armoured with sea walls which are either concrete or rip rap to prevent erosion. A correction to this matter is requested if it is to be used in planning maps and so forth.”

	<p>SSRA encourage the CCC to consider the cost of regulation to all parties in particular:</p> <ul style="list-style-type: none"> - The costs of regulating if property owners will manage the risk anyway. - There are costs when regulating too hastily, or over-regulation. <p>The costs of regulating when there is significant uncertainty. When the risk is both uncertain and beyond the life of most built structure's regulation runs the risk of unnecessarily imposing costs on the community.</p>	
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Are there other options we should be considering?

Issue	Comments	Provisional Response
Suggested alternative options	<p>Suggested alternative options put forward include:</p> <ul style="list-style-type: none"> - Option 1 in the future and a 'minimum option' in the interim period will prevent known risks that have been identified to prevent unwanted developments in the meantime. (Orion) - "Risk credit for housing stock that is replaced and provides a risk reduction. Consideration for Social capital is important not just property." (Karina Hay) - "Some improved management of coastal land area eg brooklands sand dunes which are our defence have been slowly eroded over the years from horses that council rent the land at end of street." (Kathryn Snook) - Hard protection structures and natural and nature based solutions (Phillip Ridge) - Nature reserves / wetlands (Paul Bagrie, and Pat McIntosh) 	<p>As above, the Risk Based Approach (Option1) remains the preferred option.</p> <p>The plan change will be prepared, drawing on issues raised in submissions and further technical work while giving effect to the NZCPS and RPS.</p> <p>There are a range of suggestions and we are working through how they align with national and regional direction. For example, the suggestion of "A plan provision that enables CCC to manage risk to an acceptable level (rather than trying to manage all risk) and still allows development to occur as a discretionary activity." does not align with policy 25 of the NZCPS, which anticipates that all risks are managed. However, the risk based approach enables different levels of regulation</p>

	<ul style="list-style-type: none"> - “gradual withdrawal from high risk areas especially from sea rise” (Pat Pritchett) - Investing in significant infrastructure like Holland (Simon Anderson) - ‘Implement measures to discourage population growth in Christchurch’ (Pat McIntosh) - “Intensify housing density in unaffected areas” (Pat McIntosh) - “Actions to slow devastating climate change before its too late” (Joy McLeod) - “undeveloped rural/greenfield areas and established urban areas should be treated differently. In urban areas, alterations and improvements to existing properties in medium and high risk areas should not be prohibited, but actually encouraged, as long as they provide a degree of mitigation of the effects of SLR.” (Eugenio Boidi) - “consider each area individually and look every situation on individual basis Eg- Street by street, property by property instead of looking at everything as whole area wide.” (Kathryn Snook). - Consideration of Aerospace above Kaitorete Spit (Taumutu Rūnanga, Wairewa Rūnanga). - Exemption for papakainga/Maori land (Koukourārata Rūnanga, Te Hapū o Ngāti Wheke/ Rāpaki Rūnanga) - Natural processes to be allowed to occur (Koukourārata Rūnanga) - Major earthworks avoided (Koukourārata Rūnanga) <p>One submitter suggests “pull more from option 1 that allows for improvements to existing properties. This will make them more resilient to the threat...strengthen the limitations in option 4 that prevent new developments outside the current urban limits...put more onus on council to invest in infrastructure that protects against coastal erosion and flooding.” (DC)</p>	<p>according to the level of risk. In doing so, development can be enabled in areas where there is a lower risk.</p> <p>Re hard protection options:</p> <p>Information about ‘hard’ and ‘soft’ engineering options is available in the Catalogue of Coastal Hazard Adaptation Options https://ccc.govt.nz/assets/Documents/Environment/Coast/Catalogue-of-Coastal-Hazard-Adaptation-Options-v3.pdf</p> <p>Through the CHAPP and plan change, Council needs to implement the New Zealand Coastal Policy Statement 2010, which states at Policy 25(e) (Subdivision, use and development in areas of coastal hazard risk states “discourage hard protection structures and promote the use of alternatives to them, including natural defences”.</p> <p>It is noted that Policy 27(c) Strategies for protecting significant existing development from coastal hazards recognises that hard protection may be necessary and the only option for “existing infrastructure of national or regional significance” which applies to such assets as airports, or ports.</p> <p>Policy 27(2a) also requires that any assessments undertaken with regards existing significant development “focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions.”</p>
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	<p>The Waitai Coastal-Burwood Community Board comments that the “Board agrees with the Council’s view that the level of risk is not the same in every location, but would like to include consideration of solutions as well as restrictions included in Option 1 (p. 7) when considering levels of risk (where applicable). The Board supports and emphasises the concept that development and investment should be able to continue in areas of lower risk.”</p> <p>A couple of submitters suggest a “do minimum approach now, while keeping the Residential Unit Overlay (RUO) currently in place for Southshore, New Brighton, Redcliffs and Sumner and looking to use the RUO in other areas where appropriate. ... As we commence the adaptive planning conversations, we will be better placed to make changes to the District Plan in future. We will then know the MfE guidance as it catches up with the current IPCC reports and we will have guidance on how the RMA legislation is overhauled and we know the government direction on adaptation...” (Megan Roulston and Nick Yuki)</p> <p>The SSRA comment that “We would like to see a community that continues to grow in safe way, adapting as needed. We envision homes that are resilient to earthquake and flood, lightweight, easily repaired, perhaps relocatable, innovative. More consistency and flexibility on this can be achieved. We don’t believe flexibility has to be sacrificed to achieve consistency. Existing usage rights apply. These areas are zoned residential. Existing vacant land that has not had a house on is buildable with site appropriate buildings. Encouragement of different housing types- over 60 etc. Risk is not solely evaluated on size and occupancy rate. Existing vacant land is subdividable but limited to a % of the land. Allow existing commercial sites to remain useable as commercial – required for community connection. A plan provision that enables CCC to manage risk</p>	<p>Read together, there is clear guidance within the NZCPS that supports the Council’s principle.</p> <p>Further information on the use of the NZCPS rationale for this principle can be found in the NZCPS 2010 Guidance Note: Coastal Hazards, Department of Conservation https://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/guidance/policy-24-to-27.pdf</p> <p>The NPS-UD and RM Enabling Housing Supply Amendment Act 2021 require intensification across the urban environment other than where Qualify Matters would limit this. Coastal Hazards fall within qualifying matters.</p> <p>Policy 25 of the NZCPS addresses subdivision, use, and development in areas potential affected by coastal hazard risk. It seeks to avoid increasing risk of social, environmental and economic harm from coastal hazards. In considering areas potentially affected by coastal hazards it uses a timeframe of at least 100 years.</p>
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to an acceptable level (rather than trying to manage all risk) and still allows development to occur as a discretionary activity. An opportunity to improve housing stock. For example, an old house that is ground level (high risk/ less resilient) will be encouraged to build new. The new build will be viewed as reducing risk (higher, safer, eco). The owner would get a risk reducing credit. For this risk reduction the owner would be permitted to extend the dwelling by the percentage risk reduction, therefore maintaining same risk, or less than the old house, adapting to family needs and improving the housing stock. Ensure essential services are resilient and appropriate to the area and maintained.”

One submitter (Kerrie Kenneally) raises concern that the “options seem to ignore areas which council have now put into 'rural' category and this category (sic) seems to imply that 'rural' means, large blocks of acreage which is able to be utilized for activities other than residential activities. Council has, taken our properties out of urban and consider us rural when there is absolutely no rural activities that can take place on them due to the size of these residential size lots. Council has allowed activities to take place without consent in our area that along with earthquake legacy issues have contributed to the coastal hazards. You MUST look at the issues we have been telling you about for years and stop devaluing our properties and ignoring us in your policies because your policies in the past have not included us due to us apparently being Rural.” Similarly another submitter (Kathryn Snook) comments “we have an added additional issue in that area rezoning put some properties into 'rural' planning map when really, they are residential size sections this may affect the interpretation when a payout is required as happened in the earthquake - redzone for residential NOT those in rural residential”.

One submitter (Karina Hay) considers “South shore is presently at the correct level of regulation. Planning should be supporting adaption and

A staged approach suggested by some submitters of adopting Option 2 (do minimum) in the short term followed by a more comprehensive approach (Option 1) at some future date would require two plan changes and delays the introduction of more comprehensive provisions. The first stage could be to introduce policies, rules and changes to the planning maps. The risk is that this could still leave gaps in the level of control/management that can be applied to new subdivision, use and development in areas of Coastal Hazards, particularly in higher risk areas. This is on the basis that Option 2 in the Issues and Options paper proposed some reliance on existing rules where resource consent is already required.

It is uncertain when option 1 would be appropriate to introduce, and there is a risk that development enabled in the short to medium term under option 2 results in legacy issues that need to be addressed retrospectively after option 1 is introduced.

It is also unlikely that there would be agreement as to when a second phase would be appropriate. It is unlikely that there would be a point in the near future where there is a consensus across all parties on the technical data and levels of control required.

	<p>solutions - not looking to restrict now for the uncertain outcome of the next 50years in. Recognise the known societal effects of over precautionary planning. Take an adaptive (solution based) rather than risk-based (restriction) approach.”</p> <p>One submitter (BOEE) comments that “Post King Salmon Supreme Court case under certain conditions, “avoid” can be taken to mean ‘not allow’ or ‘prevent’ in relation to things that would increase the risk of adverse events. This seems to be the way that CCC planners are interpreting their duty under the NZCPS, e.g. not allowing house extensions. The underlying assumption in these “avoid” (prevent) actions is of course that preventing (for example a house extension) is actually the lowest risk pathway and does not increase risk. ... In summary we believe that the CCC interpretation of “avoid” (prevent) from the King Salmon Supreme Court ruling is partial: it does not seem to capture the caveats to which the ruling is subject, the effects of the post King Salmon amendments, or the nature of Natural Hazards in terms of the scale of risk, or timescale of evolving risk. It also is addressing personal risk where the risks requiring attention are property risks. To a degree, the current National Guidance resolves some of the temporal uncertainty issues around new development by the use of trigger-points. This device can also be used for existing developments, but this is something we will address in our submission on the coast adaptation framework/process.”</p> <p>One submitter (Marion Smart) recommends a “blend of Options 1 and 2 could see all so called medium and high risk private residential, commercial and recreation properties move to “Regulated” rather than “Restricted”. The introduction of additional matters for discretion ... would then kick in. This is a sensible way forward that would have a far less onerous economic, social and overall wellbeing impact on land</p>	<p>A staged approach allowing time for review of the Regional Policy Statement and Regional Coastal Environment Plan would cause further delay to the management of risks and ultimately, the regional planning framework will need to give effect to existing direction in the New Zealand Coastal Policy Statement. The direction in the NZCPS provides confidence of how the City and Regional Councils are to manage the risk of coastal hazards in any case.</p>
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owners whose property is determined as high or medium risk but where the risk may never eventuate within the life of a building.”

LPC suggest given that “Environment Canterbury is presently in the process of reviewing the Regional Coastal Environment Plan, it may be worthwhile determining the long-term planning once this is completed to prevent short-term land use planning decisions being inconsistent with soon-to-be developed regional policies. LPC considers that there may be a potential alternative option between Option 1 and Option 2. This includes updating the Christchurch District Plan to remain consistent with the present Regional Policy Statement, Regional Coastal Environment Plan and New Zealand Coastal Policy Statement with the new information presented, but not extend beyond that at this stage. This staged approach would allow for the review of the Regional Coastal Environment Plan and Regional Policy Statement; those documents would set the scene for continuing from that point. LPC appreciates that there may be some immediate/shorter-term foreseeable issues, and these may be matters that should be subject to the immediate plan change.”

The CCRU comment “A truly adaptive approach does not rely on models and in fact adds protection against a ‘worse than we thought’ scenario unfolding. Under an adaptive approach you extrapolate based on recurrent trends and reassess regularly. Communities agree to stop building or build in adaptable ways in areas that will be uninhabitable in [30, 50, 100] years based on current sea level rise trends. This is reassessed every 10 years as part of the district planning process and zones extended or contracted as appropriate. This approach shares a lot with the current framework but avoids the problem of having to rely on models that will be wrong. Issues with inappropriate developments around the margins can happen in both approaches. CCC needs to consider that avoiding issues at

	the margins will require such precaution that the cost outweighs the benefit.	
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Are there other types of innovative development e.g. relocatable or amphibious that could be considered suitable within areas of low or medium risk?

Issue	Comment	Provisional Response
Innovative development responses	<p>Types of innovative development suggested include:</p> <ul style="list-style-type: none"> - Relocatable buildings (Lynda Burdekin, Mike Currie, Joy McLeod, DC, Marie Graham, Richard Dalman, Waitai Coastal-Burwood Community Board) - Modular housing (DC) - Amphibious housing (Waitai Coastal-Burwood Community Board) - Tiny/small housing on bigger properties (DC, Joy McLeod) - Providing “more consistency in the planning approach... Solutions don't always have to be restrictions”. (Karina Hay) - “Inundation in our area resulting in flood issues are also due to upstream development not just coastal hazards so better control over developments close to coastal areas” (Kathryn Snook) - “Technologies that address ground water and drainage issues, e.g. backflow valves” (Waitai Coastal-Burwood Community Board) - “Engineering solutions that help us maintain three waters.” (Waitai Coastal-Burwood Community Board) - Identify retreat areas (Thomas Kulpe) - ‘Buildings that are designed to be easily lifted/lowered in future.’ (Vic Allen) 	<p>In preparation of the plan change, staff are drawing on the suggestions raised in submissions and considering how different forms of development can be enabled. This is in recognition that enabling innovative forms of development can be a method to avoid increased risk of harm and in some cases, may be more responsive/ adaptable to the risks e.g. amphibious housing.</p> <p>With regard to the response suggesting the identification of retreat areas, a range of responses need to be considered through adaptation planning for which retreat is one option.</p>

- Use of pump trucks (Amanda Neil)
- Seawalls (Simon Anderson, DC)
- Indigenous planting (Koukourārata Rūnanga, DC)
- Vertical evacuation for communities in tsunami zones (DC)
- Alternatives to septic tanks (Koukourarata Runanga)
- Houses built over water (Marion Smart)

A couple of submitters consider that innovative development should be available in high risk areas (Richard Dalman and Marion Smart).

Conversely another submitter does not support innovative development in these areas and considers the environment should be protected (Pat Pritchett).

One submitter (Nick Reid) raised concern on whether it is possible to “scale these technologies significantly to be sufficiently affordable” and commented they are doubtful this is the case and instead should focus on increasing density in core areas less susceptible to sea level rise. Similarly, another submitter (Luci Trethewey) comments “these often have a high capital cost and are not accessible for most people. But could be an option for those with the financial means.”

One submitter considers “areas of low risk should not need innovative development” (Josiah Thompson).

Another submitter suggests including “options that provide mechanisms for people to make their own choices on the level of risk they want to take, will be very important in coastal adaptation work... There are legal instruments that could be used to ensure that the risk is well understood and to confirm the Council is not liable. In terms of

The Council has a responsibility under s31 (Function of territorial authorities under this Act) of the Resource Management Act (Referred to hereafter as the ‘act’) for “(b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of- (i) the avoidance or mitigation of natural hazards”.

The Council is required to have a District Plan and its purpose is to assist the Council to carry out its functions in order to achieve the purpose of the Act (Section 72 of the Act), including sustainable management of natural and

<p>Council services, mitigation measures could be built into the building consent, such as ensuring the flat has an above ground septic tank, power points are above 1.2 metres, etc, and that the Council will not provide services past a certain threshold...” (Rachel Puentener)</p> <p>One submitter suggests allowing “subdivision of rural land to 0.2 ha sections, and take 0.036% of all NZ farm land, that would be 0.00036% of NZ farmland per year when it has already been decreasing at 0.75% per year...The CCC Coastal Hazard Assessment says “25,000 properties that could be at risk from coastal hazards in the next 100 years, most commonly from coastal flooding. “ I calculate 25,000 0.2 hectare sections would take up 5,000 hectares. Dairy farm area in North Canterbury is about 199, 288 hectares so 5000 hectares would ... be 2.5% of the dairy farm area... And noting that many places won't be affected as much as Christchurch. 2.5% over 100 years would be very much less annually at 0.0025% than the Minister for Environment wants to decrease dairying... A 0.2 hectare section should be required to to (sic) have 0.1 hectare in indigenous NZ trees/vegetation, vastly improving natural environment on dairying as it is today. It could have a two or three storey house which would not take a great deal of the remaining 0.1 hectare”. (Brian Sandle)</p> <p>A couple of submitters comment existing use rights should still apply (Marie Graham, and Megan Roulston).</p> <p>A couple of submitters consider smaller scale improvements that could increase the overall resilience should be encouraged (including altering/raising up or extending low-lying houses with simple and cost-effective standard solutions) (Eugenio Boidi and Megan Roulston).</p>	<p>physical resources (including land) while avoiding, remedy, or mitigating adverse effects of activities on the environment.</p> <p>The District Plan must give effect to national and regional policy direction. Policy 25 of the New Zealand Coastal Policy Statement (NZCPS) directs that councils avoid increasing the risk of social, environmental and economic harm from coastal hazards, in areas potentially affected by coastal hazards over at least the next 100 years. The Regional Policy Statement (RPS) requires in Objective 11.2.1 that new subdivision, use and development of land which increases the risk of natural hazards to people, property and infrastructure is avoided or, where avoidance is not possible, mitigation measures minimise such risks.</p> <p>Existing use rights will not be affected by the plan change.</p>
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	<p>One submitter suggests building restrictions requiring appropriate housing that are innovative, easily repaired and relocatable if necessary (Megan Roulston).</p>	
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Are there other types of vulnerable/susceptible development or activity that need to be more carefully managed in areas of risk?

Issue	Comment	Provisional Response
<p>Possible types of vulnerable/susceptible development or activity that need to be more carefully managed in areas of risk</p>	<p>A few submitters offered input on types of vulnerable/susceptible development. Suggestions include:</p> <ul style="list-style-type: none"> - Infrastructure and Council assets (Karina Hay, Waitai Coastal-Burwood Community Board, Thomas Kulpe, Simon Anderson) - “Building public structures such as swimming pools, libraries, playgrounds, etc. in coastal areas subject to coastal erosion and/or flooding should be discontinued as this is not compatible with international risk management best practice” (Mike Currie) - “Anything that might have a negative impact on groundwater - eg. stockpiling of materials” (Rachel Puentener) - Avoid developing on good farmland (Pat Pritchett) - Earlham Street is vulnerable and susceptible to floodwaters and needs more careful management (Amanda Neil) 	<p>In preparation of the plan change, staff are drawing on the comments made in submissions and considering the vulnerability of different activities and the level of regulation appropriate.</p>

- Roads and access in Diamond Harbour where the community is vulnerable to being cut off (Joy McLeod)
- “Housing developments in coastal, tidal, flood zones” (DC)
- “Further housing like the Halswell developments on marsh lands should be restricted” (DC)
- “Those where people are dependent on others for their safety eg aged care facilities, medical facilities, day care centres and primary schools.” (Marion Smart)

LPC comments that a “coastal port must remain in the coastal zone, and, in the context of coastal hazards, defence options are required to be utilised. Any policy or planning rules developed must take this into account to prevent perverse outcomes from occurring; particularly for Nationally Significant Infrastructure”.

Two submitters consider there are no other types of vulnerable/susceptible development or activity that need to be more carefully managed in areas of risk: “in the issues and options paper, you mention identifying and restricting vulnerable/sensitive activities and used the example of care homes where residents may have restricted mobility and health conditions that limit ability to respond to hazard alerts. I say we are talking about flood and erosion risk predominantly caused by potential sea level rise, NOT sudden onset catastrophic flooding. Maybe your concerns here are more valid in regards to hazards in river suburbs.” (Megan Roulston and Nick Yuki)

The point made that there is time for evacuation are acknowledged and the vulnerability of activities will vary, depending on the nature of the hazard. This will be considered further.

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Should the District Plan manage areas at risk of a tsunami?

Issue	Comment	Provisional Response
<p>Inclusion of tsunami in the District Plan</p>	<p>Some submitters consider that the District Plan should manage areas at risk of a tsunami, while other submitters do not think the District plan should manage tsunami risk.</p> <p>Some submitters consider this should be left to Civil Defence and emergency services to handle (FFNZ, Marion Smart and Vic Allen).</p> <p>Submitters consider tsunami to be a rare and unlikely event. “Tsunami risk is uncertain and unpredictable and in most cases there would be plenty of time to evacuate”.</p> <p>One submitter comments that a “significant tsunami could affect all of the “flat” areas of Christchurch whether you live on the coast or Cathedral Square. In reality, many coastal areas are very close to hills eg Redcliffs, Sumner and Banks Peninsular and are therefore better placed for residents to get to safety quickly – more so than most flat areas of Christchurch. Therefore coastal areas should not be separated out as the only areas subject to tsunami impact.” (Richard Dalton)</p> <p>Submitters mention that there are warning systems and evacuation routes in place.</p>	<p>Policy 24 of the NZCPS addresses the need to identify areas of potential coastal hazards, including tsunami.</p> <p>. In addition, Policy 25 of the NZCPS states “<i>In areas potentially affected by coastal hazards over at least the next 100 years: ...</i></p> <p><i>(f) consider the potential effects of tsunami and how to avoid or mitigate them.</i>”</p> <p>Council must give effect to the NZCPS and staff are giving further consideration to the methods to implement this direction within and/or outside the District Plan. Unlike other parts of policy 25, clause (f) provides some flexibility by stating that Councils give <i>consideration</i> to the effects and <i>how</i> to manage those effects.</p> <p>The provisions being developed will reflect this direction and will further consider matters raised by submitters.</p>

	<p>LPC request that “if CCC chose to develop plans for tsunamis, LPC will have input into this process to prevent adverse impacts on its activities which provide for the region”.</p> <p>The CCRU comment that the “DP is too blunt an instrument that would lead to depopulation in very large areas if the same level of precaution was applied to tsunami that is being applied to sea level rise. If tsunamis were modeled on top of sea level rise then an even greater area will be affected...”</p>	
Other views	<p>Other matters relating to tsunamic risk raised by submitters include:</p> <ul style="list-style-type: none"> - District Plan should manage Tsunami risk but only “once hard engineering factors have been factored in” (Phillip Ridge) - Better public awareness of tsunami risk is needed (Waitai Coastal-Burwood Community Board, Pat McIntosh) - There should be high point evacuation zones (such as in the red zone) (Reese Dell) - “Complete the building of stop banks along the Waimakariri River, the Brooklands Lagoon and the east coast” (Amanda Neil) 	

Should we have specific policies and rules on groundwater, or rely on policies and rules for managing coastal flooding?

Issue	Comment	Provisional Response
Specific policies on groundwater	Some submitters consider there should be specific policies and rules on groundwater, while others (Vic Allen and Murette Wells) consider that it should not be separated from coastal flooding rules.	Council has built its current understanding of shallow groundwater through technical investigation. Understanding of potential extent of shallow groundwater

	<p>Submitters consider groundwater cannot be separated from other flooding (Waitai Coastal-Burwood Community Board, Thomas Kulpe).</p> <p>Reasons for support for groundwater policies and rules include: salt water intrusion into drinking water aquifers becomes more likely as sea level rises (Mike Currie); the management and impact of ground water and coastal flooding is different (FFNZ); flooding is a Christchurch issue exacerbated by flooding (Waitai Coastal-Burwood Community Board); high groundwater table is not limited to the coastal area (Thomas Kulpe); Christchurch was built on a swamp (Phillip Ridge); as groundwater rises and associating hazards have unique effects in different areas (Luci Trethewey); and there is need to look after our groundwater and also ensure stormwater does not go into ground water (Pat Pritchett).</p> <p>One submitter indicated that it is not clear what groundwater rules are intending to achieve (Josiah Thompson).</p> <p>Submitters consider groundwater to be a city wide issue.</p> <p>SSRA, BOEE and Vic Allen consider further information is needed before groundwater can accurately be addressed on a planning level.</p> <p>LPC comments that “Specific policies and rules on groundwater may be preferable based on the different technical aspects/regimes associated with this feature.’</p>	<p>and its impacts on land, property and people will continue to build with further data collection and study. Issues with shallow groundwater extend beyond the area influenced by Coastal Hazard. Consideration is being given to separating further study and decision making on district plan and LIM matters from coastal hazard to enable a city-wide approach to be developed.</p>
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Other views on groundwater management	<p>Other matters relating to groundwater raised by submitters include:</p> <ul style="list-style-type: none"> - Stormwater drainage needs improving (Richard Dalman, Marion Smart and Reese Dell) - “let people on affected properties manage these issues as they arise” (Harry Stronach) - Unequal treatment of non-residential properties (Kerrie Kenneally) - “it's my understanding there are natural springs in the area - I believe one budst (sic) and flooded NB Countdown during the earthquakes. It seems to me coastal inundation isn't the only risk.” (Paul Bagrie) - “Rely on flooding rules” (Marette Wells) - “Areas such as Earlham Street, which has constantly fluctuating levels of ground water due to over filling the Styx River and king/spring tides during times of heavy rainfall, need instant access to pump trucks to alleviate each flooding event within 24 hours” (Amanda Neil) - “We do not optimize safe water for all. Rain water collection, prevention of run off into rivers, creeks and Harbour are needed. Ban chemicals such as Roundup.” (Joy McLeod) 	
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Questions raised

Issue	Quotes	Provisional Response
MfE advice	<p>Richard Dalton – (regarding RCp8.5) Why has the council not followed the advice from Ministry for the Environment? Why do they feel they can ignore this advice? This blatant refusal to follow advice from the Government is consistent with a</p>	<p>The Council, through the proposed plan change is to give effect to the NZCPS and act in accordance with the provisions of sections 5, 6, 7, 8 and 75 of the RMA. In this</p>

	<p>council officer telling me previously that they did not follow the MBIE advice on flood hazards post-earthquakes. The Christchurch City Council is getting a reputation.</p>	<p>regard, Council staff do not consider the preferred option is inconsistent with MfE advice or national direction.</p> <p>Council relies on guidance from the Ministry for the Environment on which sea level rise scenarios to consider for information and planning. This guidance has not yet been updated following the release of the updated IPCC AR6 report (2021). Until national recommendations are updated, Council will continue to follow the current guidance which recommends the use of all 4 scenarios, and RCP8.5 where a single scenario is required to allow for longer term effects and stress testing of possible outcomes.</p> <p>Accordingly the CHA includes the full range of scenarios from low to high.</p> <p>Council has initiated discussions with researchers involved in the NZ SeaRise programme who are updating national projections to account for the latest IPCC data and has not received advice to discard the RCP8.5 or SSP5-8.5 scenarios.</p>
<p>Tidal flooding and sea level rise</p>	<p>Megan Roulston (also Nick Yuki in separate submission) - The risk of flooding in Southshore is a future risk from potential sea level rise. Could this rise cause tidal flooding in extreme events? Yes eventually – but in terms of life risk and safe access this risk could be addressed by appropriate conditions. My lay persons understanding of the nature of the potential flooding is that any flooding would be of low velocity and would develop slowly rather than catastrophically. Therefore risk can be managed with appropriate mitigation measures. The risk is to property –not life. Wellbeing is more negatively impacted when overly onerous planning rules unnecessarily stifle and run down</p>	<p>Sea level rise is not the only coastal flood hazard – severity of risk to life depends on the event.</p> <p>The Jacobs report: Risk Based Coastal Hazard Analysis for Land-use Planning considers factors such as water depth and velocity in determining the level of risk. As has been demonstrated through the advice from Jacobs, flooding of depths exceeding defined thresholds poses a risk to life even if at low velocity.</p>

	currently thriving communities. Children are more negatively affected, through living in stress and through social decline and through the negative economic impacts on their parents.	The Section 32 evaluation will consider the benefits and costs of the preferred option and alternatives, including the social and economic effects on communities affected.
Changing data	<p>Andrew Evamy - "I feel you're relying on low submission rates to push this through - you know the impacted suburbs are tired and over 10 years of fighting for the estuary edge to be repaired.
</p> <p>The data on sea level rise and ground water is constantly changing - how will your policies adapt to constantly changing data - or will it be rigid like other policies? "</p>	<p>Submissions are considered on their merits.</p> <p>As mentioned further above MfE guidance, acknowledges that there is unlikely to ever be complete agreement on the science. However, Council's inclusion of multiple scenarios within the modelling allows for adaptive planning and recognises the inherent uncertainty in any modelling that estimate future climate conditions.</p> <p>With regard to the plan change, Council staff are considering methods that are flexible and responsive to changes in the environment, including sea level rise. An example is enabling development until sea level reaches a defined threshold as opposed to a time based threshold.</p>
Inequitable focus on coastal areas	<p>SSRA - SSRA have concerns about the inequitable focus on coastal areas from a climate change planning perspective. Climate change will increase the number of wildfires. There have been repeated fires in the Port Hills. Do they have a wildfire zone overlay? Do houses in the Port Hills have a LIM notation that say they may be subject to wildfires? Have these houses been required to build with non-combustible materials?</p>	<p>The District Plan addresses a range of natural hazards that are distributed across the city, not just the coastal communities.</p> <p>With regard to the risks from fire, staff have considered methods in the District Plan to manage the risk in response to a recovery plan prepared.</p>
Mapping city-wide	<p>SSRA - Christchurch is a low-lying city, and it is evident SLR and climate change will affect the ENTIRE city. It is disappointing that conversation is solely focused on the coastal areas. We accept that there may be SLR and climate</p>	<p>The District Plan Review introduced/ reviewed a range of provisions addressing natural hazards across the city, including other parts of the city affected by flooding. This includes policies and rules to manage the risk associated</p>

	change hazards specific to the coast, but where is the mapping indicating the hazards of SLR and climate change city-wide?	with flooding from rivers and rainfall, which includes an assumption of 1m of sea level rise. In response to submissions the Canterbury Earthquake (Christchurch Replacement District Plan) Order in Council 2015 recognised that coastal hazards were not a recovery matter that required an expedited process. The amendment removed coastal hazard provisions from the District Plan review and directed that the Council address this separately.
Ongoing data collection	Orion - How often will the data that has been used to determine the level of risk for areas be recollected?	The District Plan needs to be reviewed every 10 years and must give effect to the direction in the NZCPS and RPS. A review of the evidence will be required to inform any future reviews of the plan, including drawing on any new information.
Working with industry/infrastructure providers	Orion - Would council work with industry and infrastructure providers in the areas of risk and within a retreat to provide a smooth transition?	The Council will engage with stakeholders and will consider a range of responses through adaptation planning for which retreat is one option.
How submission influences DP changes	BOEE - Finally, one of the reasons for the existence of BOEE, (and this submission), is to moderate the information and power inequality across the adaptation process, i.e. between councils and communities. These submissions take significant time to produce and have to be fully referenced to be valuable. Accordingly, in the spirit of transparency, we would like to know, consistent with the definition ¹ of ‘consultation’, how this submission changes the approach and content of the proposed DP changes.	The submissions will be reported to the CHWG and Urban Development and Transport Committee as work on the Plan Change progresses. In development of the plan change the feedback is being considered and staff are drawing on the ideas as well as how to address the issues raised in submissions.
Level of risk clarification	FFNZ - Specifically, regarding the discussion document we would like further clarification of the information provided in table 2 “High Level Activity Status by Risk” (page 9), in terms	This will be considered further in developing the provisions.

	of what is meant by “fencing” as an activity. Is this mean to cover only urban fencing or including the vast tracks of farmland fencing that this would cover? The way the table is currently set up, large amounts of farm fencing would be captured by the restricted/non-complying control level – which is unacceptable to landowners, and an impediment to existing farming activities.	
Areas of risk	<p>Waitai Coastal-Burwood Community Board - • The Board would like more information about how the District Plan Change will relate to current restrictions, specifically:</p> <ul style="list-style-type: none"> o Will the restrictions that are currently in place in areas like Southshore be applied in other areas that are not currently restricted? Or, o Will the areas that already have restrictions become more restricted as a result of the Plan Change? 	<p>The current DP provisions (FMA and HFHMA) do not address coastal hazards risk to the extent that is appropriate to give effect to the NZCPS and RPS. Where possible, the plan change will seek to avoid duplication and streamline existing provisions.</p> <p>The level of restriction is being considered in development of the plan change and a draft plan change will be consulted on to enable further consideration of the approach and feedback from the community.</p>

Confusion over Coastal Hazards Plan Change and Coastal Adaptation Framework

Issue	Comment
CAF & CHPC – Believe guiding principles linked to plan change	<p>David East - The Four options are predicated on the Guiding Principles being agreed upon. “From Principles flows policy and from policy come actions and regulations. Everything flows from the Guiding principles”- As such the options, possible innovative development and consideration of vulnerable / susceptible development cannot be considered until the Guiding principles are agreed, technical papers are adequately assessed, modelling and mapping are agreed by all. For those reasons I am unable to select any of the options and consider that there may be more or hybrid options.</p> <p>North Beach RA – The Four options are predicated on the Guiding Principles being adopted, which we submit need to be reassessed. Consequently, options such as possible innovative development and consideration of vulnerable/susceptible development cannot be</p>

	<p>considered until the Guiding principles are agreed, technical papers are adequately assessed, modelling and mapping are agreed by all. For those reasons we are unable to select any of the options.</p>
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