



Christchurch Coastal Residents' United (CCRU) is an association of coastal residents, communities and experts from across New Zealand that look to engage, inform and find solutions for issues that affect Coastal residents. Primarily focused on the Christchurch area but engaging with wider scope across various national and international organization. As our focus is Coastal communities, we have provided this submission on the CCC Draft Integrated Water Strategy with a focus on Coastal infrastructure, response to climate change and SLR in Coastal areas and the Wellbeing of Coastal communities.

Vision - Sections 3/4

CCRU suggest your **VISION** should be retitled "**Water for Life and Living**". We believe this better aligns with the Local Government (Community Well-being) Amendment Act 2019 and supports the value of environmental, social, cultural and economic wellbeing of current and future generations.

We also suggest that you amended your third vision statement - "to Better **understand** and manage hazards from flooding and sea level rise" This would reflect your commitment to a willingness to have ongoing transparent dialogue about current information to hand, adaptation, timelines and options for response

Principles

Your concept of place making is important. Our observation is that your definition is not in keeping with the true spirit of place-making. You have indicated that it is about bringing the community with the council. However true placemaking is about strengthening the connection between people and the places they share. Placemaking refers to a collaborative process by which we can shape our public realm in order to maximize shared value. It is not about the "bringing the community along" for the ride as a passenger. The processes need to support equity and justice. Recent work on the ethics of adaptation has pointed out that responsibility of justice and equity extends beyond the institutional actors and communities, but also the professionals, e.g. consultants/modellers and council officers. **We would like to see a definition of Placemaking that more accurately reflects this**

Flood management – your strategy acknowledges the different types of flooding. CCRU believes your strategy needs to be clearer about separating out normal flooding and flood hazards from climate change **moderated** ones as they will require different time frame considerations and responses

Tangata – We agree" Our environments are places of human occupation" Your strategy needs to better recognise the economic, social and wellbeing cost benefits in respect to the **value of existing communities**. This is particularly important when it has come to historical decision-making processes that have been lacking and yet are paramount to successful adaptation.



Strategies - Section 5

5.7 flood and flood management – The Government Act states that local councils have a responsibility to provide for the health and safety of the community and maintain a duty of care with respect to managing drainage, and the effects of flooding. Better consideration of cost/benefit analysis is required.

For example, the stormwater outflow for the estuary. There have been numerous issues in the Redcliffs area with Stormwater backup flooding. The design has proven inadequate and the servicing of these is underbudgeted. It has been conveyed to these communities that servicing more than a few times a year is not cost effective. A similar scenario has been ongoing for the Eastern side of the Estuary. This has led to unnecessary surface flooding for coastal communities, that could have been avoided and the budgeted servicing maybe have been sufficient if the design was fit for purpose. The outcome of a design that do not meet community needs for basic infrastructure leads a long-term effect on wellbeing given repeat damage, perceived risk and insurance issues.

“In some areas, groundwater is very close to the ground surface and inhibits the infiltration of floodwaters into the soil. This increases runoff, which may worsen flooding and sometimes leads to prolonged standing surface water” - The response to this needs to be in context with information provided for the city as a whole. Given that large areas of Christchurch City are low-lying, ground surface water is a city-wide conversation (e.g. St. Albans), not just in coastal areas. It is also the case that the after-effects of liquefaction reduce soil permeability, hence high runoff can have very little to do with groundwater levels.

5.8 Responding/ adapting to climate change and SLR. – CCC needs to work better to understand the likelihoods behind climate change projections. This strategy needs to more clearly define the need to separate out flood issues and hazards that are a result of normal flooding and those that are flood hazards from climate change driven modelling and SLR predictions. This is important distinction for timing response and the adaptation process. Clear distinction needs to be made between surface flooding, river flooding (plus storm events + natural tidal cycles, including their probabilities) and the monitoring of and decision making around projected SLR for inland and coastal areas.

“Development of dynamic adaptive planning pathways will be required in order to inform decisions in light of the uncertainty with sea-level rise predictions”

CCRU suggest that there needs to be a fuller definition on what is meant by “dynamic adaptive planning pathways” A full economic analysis needs to be part of this pathway, paying attention to scenario likelihoods. This should also include, as per IPCC opportunities to exploit beneficial opportunities. Adaptation can greatly reduce the impact of sea-level rise (and other coastal changes), although it requires adjustment of coastal management policies to changing circumstances hence it must be as you suggest dynamic. Consequently, CCRU see adaptation is a social, political, and economic process, rather than just a technical exercise, as we have observed so far in Christchurch

IPCCs definition: The IPCC Fifth Assessment Report define adaptation as ‘the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects’ (IPCC, 2014).

Goals- Section 6

Goal 3: That the effects of flooding, climate change and sea level rise are understood, and the community is assisted to adapt to them.

With the addition of “that” CCRU assume you are indicating your goal here is that there is an ongoing and shared process that enable all stakeholders, community included to gain an understanding if this is your point then we believe it is congruent with your previous statement of the need for a “dynamic pathways”. They way it reads it indicates that climate change is understood- In our view that climate change is not completely understood - there are many potential scenarios, adaptation options and possible outcomes. The economic, social and environmental costs also need to be included, psychosocial costs and how they will be dealt with.

“Sea level rise has implications for the district in terms of increased coastal inundation, shallower groundwater, particularly in coastal areas and along tidal stretches of the rivers, higher flooding levels and erosion. It is therefore necessary to take a long-term view and have a flexible approach to the management of flooding and sea level rise that enables the community to understand the risks and make timely adaptations when pre-defined conditions or triggers are met.”

While on the surface this sounds reasonable although CCRU believe that the strategy should reflect that it is key communities are not forced to leave their homes too early or coerced into moving through financial mechanisms (not protecting homes), using financial instruments etc, that would leave communities vulnerable and foster further inequities. Adaptive trigger points and collective management of those trigger points needs to be clearly financed, otherwise it is just a paper exercise.

Key elements of goal 3

“Understanding the extent, effect and risk of flooding, and managing effects and adapting to flooding risks – by continuing the existing programme of investigations and physical works in the interim, while developing, communicating to the community and then implementing a risk based approach to managing the effects of flooding using options appropriate to specific situations.

Understanding risks due to sea level rise and consequences resulting from climate change and developing an adaptive response.”

CCRU see it as crucial that elements such as likelihood's and uncertainty are accurately included in the approach to managing the risk and effects of flooding

Objectives- Section 7

Continuing to manage for the six core values for stormwater and flood management 4/ page 23

'For over 20 years, we have focused on a multi-value and multi-party approach to stormwater and flood management. By identifying six core values – ecology, drainage, culture, heritage, landscape and recreation – as the drivers for improved surface water, stormwater”-

CCRU suggest that in keeping with the LGA and the recent Wellbeing stance of the Govt- It is essential that social wellbeing and health be added to your core values.

Objective 7- executive summary page (iii) Flood management and adaptation

Manage and adapt to the effects of flooding using natural systems, planning tools, community adaptation and infrastructure solutions.

Regarding the above Objective 7 in the executive summary page (iii) CCRU believe there should be a strong focus on adaptation solutions and mitigation, especially where there are existing long-term communities rather than default to planning tools as a sole vehicle of management.

In addition, the council need to increase their capability in this emerging field, including consideration of adaptation technology and management in other countries that are further ahead in their adaptation planning, or working with other experts in this field. Experts should also include the communities that will be directly affected by decisions, and ideally the communities should be the decision makers (true partnership approach).

CCRU- Additional comments

CCRU are concerned the strategy does not address the event where communities downstream are affected by flooding due to development upstream. If risk is increased by upstream development, it must be mitigated **at** no cost to downstream communities.

We suggest that the strategy better foster the need to have a more comprehensive understanding of the likelihoods behind climate change projection

In relation to Coastal communities, while recognising that higher order documents will inform the shape of a response, there is need to be willing and prepared to explore novel solutions that look to adaption and mitigation before continually reaching for 'planning tools' as a primary default response mechanism

The draft strategy should ensure there is a Provision of solution options that achieve equity across communities and that are able to be implemented.

CCRU believe Placemaking facilitates creative patterns of use, paying attention to the physical, cultural, and social identities that define a place and support its ongoing evolution and wellbeing.