# Coastal Adaptation Framework

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Christchurch City Council



# Adaptation planning is about preparing now, so that we are ready for what may happen in the future.

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# Glossary

| Term | Definition |
|---|---|
| **Adaptation** | The process of adjusting to change. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. |
| **Adaptation Area** | Large sections of coastal and low-lying inland areas that are likely to be affected by coastal hazards. Adaptation Areas in the Christchurch district have been identified based on similar geographic features and environments, and existing communities and infrastructure. |
| **Priority location** | A defined at-risk location within an Adaptation Area where adaptation planning will occur. |
| **Adaptation options** | The array of interventions that are available and appropriate for addressing adaptation. These include policies, practices, built structures, and ecological interventions. |
| **Adaptation pathways** | A decision-making strategy that is made up of a sequence of adaptation options, as well as triggers and decision-points that will be revisited over time. The wide range of options considered, evaluated and left on the table allows decisions to respond to future realities. |
| **Signal** | Signals warn that a system may soon no longer perform to the existing standard. Signals highlight changes in risk by using indicators such as increasing insurance premiums or increased flood frequency. Signals can be determined by working backwards from a trigger and threshold. |
| **Trigger** | Triggers activate a chain of decisions to ensure that implementation of the next option is complete before a threshold is reached. These pre-determined indicators build in implementation actions such as time for District Plan changes to be made or public funds to be approved and allocated. Triggers can be determined by working backwards from a threshold. |
| **Threshold** | Thresholds describe possible scenarios that mean we have not acted quickly enough to address the risk. These scenarios can be time-based or event-based. An example may be when a certain level of sea level rise is reached and assets are flooded. |
| **Assets** | Things that are of value (tangible and intangible) to the Council, community, or stakeholders. Assets can be natural or built, and in private or public ownership. |
| **Coastal Panel** | The Coastal Panel is a group of rūnanga and community representatives tasked with undertaking analysis of the adaptation options and identifying preferred adaptation pathways for their Adaptation Area which are then submitted to Council for a decision. The Coastal Panel will include wider-city and youth representatives. |
| **STAG** | The Specialist and Technical Advisory Group (STAG) provides information and advice to support evidence-based decision-making by Council and the Coastal Panel. It is comprised of experts from different disciplines. |
| **Short term** | Less than 30 years into the future. |
| **Long term** | 30 to 100 years into the future. |

# What is this Coastal Adaptation Framework?

This Coastal Adaptation Framework is a starting point for the work by the Christchurch City Council (the Council) and communities to create adaptive pathways that will allow us to plan for, and respond to, coastal hazard risks now and in the future.

The Framework sets out our initial approach to:

- Roles and responsibilities
- Principles to guide decision-making
- A flexible process for engagement and decision-making

The Framework might need to be reviewed and adapted in the future to better respond to issues or respond to new information or new ideas. This Framework describes our current thoughts on an approach to developing adaptation pathways, regardless of the Adaptation Area, or when the adaptation planning takes place. This approach, and any changes that we make to it, is designed to align with the New Zealand Coastal Policy Statement 2010, the Ministry for the Environment's Coastal Hazards and Climate Change Guidance (MfE guidance) for Local Government, and relevant strategies, policies and plans from the Council.

Central Government has signaled that further guidance and/or legistation relevant to adpatation planning will be delivered over the coming years.

We anticipate that this guidance and/or legislation will address the complex legal and technical issues associated with managed retreat and funding and financing adaptation.

Although this clarity is not available yet, we think it is essential that we start this process with communities sooner rather than later.

If necessary, we can change this Framework to respond to these legislative changes, as well as to any future potential changes to our current decision-making frameworks.

There is a range of supporting information, including a *Management Framework* and *Catalogue of Coastal Hazard Adaptation Options* that sit alongside this Framework. You can read more about the supporting information on pages 18 and 19 of this document.



# Putting it all in context

## What is adaptation planning?

Adaptation planning is about preparing now, so that we are ready for what may happen in the future. We are generally following the approach recommended by the 2017 MfE guidance, with modifications undertaken where appropriate. The guidance document sets out a ten-step decision cycle of structured engagement which aims to increase awareness of the impacts of sea level rise, and lead to the development of community-led adaptation pathways that consider the social, cultural, natural and built environments.

The adaptation planning process is flexible in that it might change at any time to account for new information, new processes or new Council priorities but regardless of any changes, it puts community engagement at the centre of decision-making. It also gives us an adaptable, versatile way to progress things and make decisions, even when there is uncertainty about the rate and effects of climate change.

## Why do we need to do adaptation planning?

It is predicted that New Zealand will experience 30cm of sea level rise by 2050, 50cm of rise by 2075 and 1m of rise by 2115[1]. Even if emissions are reduced, it is virtually certain that global mean sea level will continue to rise through 2100, and there is high confidence that longer term impacts will be seen for centuries to millennia to come[2].

Low lying coastal and inland communities across Ōtautahi Christchurch will be increasingly impacted by intense storms leading to more frequent and extensive coastal flooding, erosion, and rising groundwater.

The New Zealand Coastal Policy Statement 2010 requires local authorities to consider and plan for these risks through pathways such as adaptation planning with communities, and the management of risks through the District Plan[3].

As a region, Canterbury has around $1B of local government owned infrastructure exposed to coastal hazards, the majority of which is in Christchurch. As sea levels rise, Canterbury has the most public infrastructure exposed to coastal hazards in New Zealand[4].

As a city, Christchurch is more exposed to coastal hazards than either Auckland or Wellington[5]. Across the Christchurch district, approximately 32,700 properties could be at risk from coastal hazards with 1.5m of sea level rise, most commonly from coastal flooding[6]. The National Institute of Water and Atmospheric Research (NIWA) estimates that with 1m of sea level rise the replacement value of buildings in Ōtautahi Christchurch is approximately $6.7B, the majority of which are residential[7].

Unless we adapt, the impacts of coastal flooding, erosion and rising groundwater will greatly affect us and our environment into the future.

We have identified the coastal and low-lying communities within the Ōtautahi Christchurch district that are most at risk from coastal hazards through an updated Coastal Hazards Assessment. Given the extent of our district's exposure, we will be taking a staggered approach to community-led adaptation planning in different Adaptation Areas. In the first instance, we will focus adaptation planning on priority locations where coastal hazards will arise in the short-term – the next 30 years. Where hazards will arise in the longer-term – over 30 years, we will focus on raising awareness to ensure communities are aware of the risk.

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[1] *Bell, R., Lawrence, J., Allan, S., Blackett, P., & Stephens, S. (2017). Coastal Hazards and Climate Change: Guidance for local government. Ministry for the Environment. (Note: This statistic uses a baseline period of 1986-2005. We have used a baseline of 2020 and have experienced around 10cm of sea level rise since the MfE baseline and therefore expect to see around 20cm of additional sea level rise over the next 30 years, by 2050).*

[2] *Intergovernmental Panel on Climate Change. (2021). Summary for Policymakers. In Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press.*

[3] *Department of Conservation. (2010). New Zealand Coastal Policy Statement. https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf*

[4] *Simonson, T., & Hall, G. (2019). Vulnerable: the quantum of local government infrastructure exposed to sea level rise. Local Government New Zealand.*

[5] *Parliamentary Commissioner for the Environment. (2015). Preparing New Zealand for rising seas: Certainty and Uncertainty.*

[6] *This statistic was updated in April 2023 to reflect more accurate data.*

[7] *National Institute of Water and Atmospheric Research. (2019). Coastal Flooding Exposure Under Future Sea-level Rise for New Zealand. The Deep South Challenge.*

## What are coastal hazards?

In line with the MfE guidance, the Coastal Hazards Adaptation Planning programme focusses on three main coastal hazards that are made worse by climate change:



- **Coastal flooding** happens when normally dry, low-lying coastal areas are flooded by the sea. This usually happens as a result of a severe storm, but rising sea levels could also cause 'sunny day' flooding from high tides.



- **Coastal erosion** is a natural, ongoing process that occurs when the sea wears away the land. Some coastal areas experience short periods of erosion, but then recover (build up again) while others continuously erode and never recover. Coastal erosion may become more severe as a result of the impacts of climate change such as rising sea levels and increased storminess.



- **Rising groundwater** can bring the water table closer to the ground surface. Near the coast, the level of the sea often influences groundwater levels. We can therefore expect to see the groundwater rising as sea levels rise. At its most extreme, groundwater could rise above ground level and cause temporary or permanent ponding of water.

While the programme focusses on coastal hazards, in areas where other hazards such as river and rainfall flooding, landslides, or wildfire are also present, the programme will take a holistic approach to risk reduction.



## How can we adapt to coastal hazards?

Options that can be used to adapt to coastal hazards are typically grouped into five different types:



- **Maintain:** *We enhance what we're already doing*

We continue to live in an area while increasing knowledge of the environment and aiming to increase community risk awareness. Options include things like emergency response management, maintaining existing infrastructure, broad district-wide land use planning, environmental monitoring and community awareness raising.



- **Accommodate:** *We live with the hazard*

We continue to use land in an area by raising our tolerance to the hazards, which means we can avoid or delay the need to remove or relocate at-risk assets in the short term. Options include things like adapting buildings and infrastructure, raising land levels and managing ground and storm water.



- **Protect:** *We keep the hazard away*

We interrupt coastal hazards using nature-based engineering approaches, hard-engineered structures, or a combination of the two, to form a barrier between assets and the hazard. Options include things like shoreline nourishment, seawalls, or stopbanks.



- **Retreat:** *We move away from the hazard*

We retreat from coastal areas, or relocate existing and planned development to reduce our exposure to the hazards. The hazard risk to assets is reduced or removed entirely, leaving the coast to respond to natural processes. Options include things like buyouts, land swaps, or leasebacks where property rights are purchased with the provision that the land is leased back to the former owner.



- **Avoid:** *We don't move into the way of the hazard in the first place*

We use planning tools to avoid increasing the risk of harm to people and property. Options include things like land zoning or setbacks that prevent development in some areas.

More detail about specific options can be found in the *Catalogue of Coastal Hazard Adaptation Options.*

# Roles and responsibilities

While the Council, on behalf of the community, is responsible with Environment Canterbury for managing risks posed by coastal hazards and is responsible for managing the risk to Council-owned assets and income, the Council does not have an explicit legal obligation to protect privately owned assets from coastal hazards.

Private asset owners (individuals, organisations, businesses, and iwi who own built structures on private land) are responsible for managing risks to their assets and incomes. The private asset owner's role is to:

- Be aware of the risks and their responsibility for managing them.
- Comply with regulations that apply to their assets and activities.
- Take steps to understand the magnitude and nature of the specific risks to their assets and activities.
- Develop and implement strategies and actions to manage these risks.

**The Council's role is to:**

- Prepare and implement civil defence and emergency management plans.
- Develop and implement plans, policies and regulations for the identification and management of coastal hazards.
- Facilitate the building of resilience and adaptive capacity within communities including providing information about known risks posed by coastal hazards.
- Where appropriate, work in partnership with communities to identify and manage the risks posed by coastal hazards and their impacts.



# Our coastal adaptation guiding principles

As we have mentioned, adaptation planning will take place in different Adaptation Areas at different times. To encourage an equitable approach across all communities, we want to establish some clear principles now, to help guide our adaptation planning programme.

We have come up with the following principles with input from our partners Papatipu Rūnanga and Environment Canterbury:



### Uphold te Tiriti o Waitangi

We will uphold the principles of the Treaty, including the principles of partnership and the active protection of Ngāi Tahu interests in land and water. This commitment includes recognising rangatiratanga and the duty to actively engage with mana whenua.



### Develop local plans with local communities and for local environments

Adaptation planning will respond to the scale of the risks and vulnerabilities of each Adaptation Area and its assets. It will reflect local values, and other considerations that may exacerbate community vulnerabilities, such as lower levels of hazard awareness and socio-economic challenges. Adaptation planning may produce different results in each place – there is no 'one size fits all' solution or timeline for addressing coastal hazards.

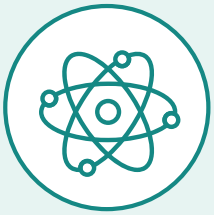


### Focus on public assets that contribute to the health, safety and wellbeing of communities

While the adaptation planning process will consider communities as a whole and will identify private assets at risk of coastal hazards, Council's resources (including public funds) will primarily be used to manage risks to public assets that contribute to the health, safety and wellbeing of communities. Public assets may include infrastructure systems such as water pipes and roads, facilities such as libraries, pools and parks, and services such as waste collection.

Privately owned assets that directly contribute to the health, safety and wellbeing of communities may also be a focus for adaptation planning (but not necessarily public funding) if they provide critical community infrastructure. These assets may for example include: marae, urupa, churches, surf lifesaving services, and buildings and/or land used for civil defence and emergency services. This does not include privately owned recreation facilities or entertainment and hospitality venues.

Private asset owners are responsible for managing risks to their assets and incomes. Any private benefits from Council funded adaptation should be indirect or incidental.



## Be flexible and responsive

Adaptation planning acknowledges that, while the sea is rising, there is uncertainty around when and how different areas will be impacted. This means we need to consider and accommodate a wide range of scenarios and potential options. We need to be responsive to future opportunities, technologies, funding sources and changes resulting from the Government's reform of the resource management system.



## Recognise inter-generational equity issues

We will take a long-term view to ensure adaptation planning is sustainable, provides benefits to current and future generations, and is not driven by short-term decisions on cost savings or avoiding loss. We will prioritise options and pathways that minimise the burden on future generations and maximise inter-generational equity. Where appropriate, this may mean action is needed now, to avoid shifting the financial burden of implementing adaptation pathways on to future generations.



## Prioritise natural and nature-based options

We will identify and prioritise natural and nature-based options wherever feasible, in preference to any hard engineering options. This is in line with the New Zealand Coastal Policy Statement 2010 which recognises that natural options provide additional benefits including protecting and enhancing the natural environment and taonga, and maintaining and creating recreational assets. Examples of natural and nature-based adaptation options can be found in the *Catalogue of Coastal Hazard Adaptation Options.*



## Consider long-term sustainability

We will consider all options for managing the risks posed by coastal hazards for communities, with a particular focus on long-term, sustainable risk-reduction approaches. This focus is in line with the New Zealand Coastal Policy Statement 2010 and will help ensure we acknowledge the carbon cost of implementing options, the residual risk created by different options and the impacts of maintaining options.

This principle aims to ensure that future costs of adaptation options are considered. For example, the costs of ongoing maintenance of some built structures may over time be greater than the cost of adaptation options such as managed retreat or avoiding new development. Different options can be found in the *Catalogue of Coastal Hazard Adaptation Options.*

# Our engagement principles

- Be open, transparent, accessible and inclusive, and encourage diversity of views.
- Provide meaningful opportunities for engagement where people's views and feedback can genuinely influence the process.
- Acknowledge the partnership status of Te Rūnanga o Ngāi Tahu and the Christchurch City Council under Te Tīriti o Waitangi.
- Recognise, value, and respect local knowledge and expertise.
- Encourage innovation and thinking that acknowledges not just individuals, but also communities, the wider city, the natural environment and future generations.
- Provide additional support to encourage children and young people to be involved, as they will be impacted most.
- Recognise the importance of community connectedness and networks for residents in maintaining community wellbeing.
- Recognise different communities have different needs, and that different approaches to communications and engagement will be needed to encourage people to engage with the adaptation planning process.
- Encourage and support education initiatives for all ages in local communities going through adaptation planning and the wider community, to raise awareness and understanding of the issues involved.
  Note: The Council is also committed to actively supporting broader education on climate change and sustainability as core to Kia Tūroa te Ao – *The Climate Resilience Strategy.*



# Our approach to adaptation planning with each adaptation area

To encourage an equitable process that results in adaptation plans that are supported, where possible, by both residents and the Council, we are proposing to follow an approach that will include engagement with mana whenua and communities, technical work by the Specialist and Technical Advisory Group (the STAG), and a recommendation from the Coastal Panel for Council decision on adaptation pathways.

We estimate that to get through this process, it will take approximately two years. Once we have completed planning in one Adaptation Area, we will move onto the next Adaptation Area.





### Who are the Coastal Panel?

A diverse group of community and rūnanga representatives from each Adaptation Area. Some city-wide representation will also be included as well as youth voices. There is one Coastal Panel per Adaptation Area.

The role of the Coastal Panel is to provide informed recommendations to Council for adaptation plans that allow communities within the Adaptation Area that are impacted by coastal hazards, to respond to changes over time.

### Who are the STAG?

A specialist and technical forum that assists the Council and Coastal Panel with the creation of adaptation pathways.

Members are experts in their fields from across a number of agencies, and are able to provide information, advice and guidance to support Coastal Panel decision-making.

## Initial community engagement about the Adaptation Area

Adaptation planning about an Adaptation Area starts with a period of engagement with people who live in the Adaptation Area in order to:

- Develop a shared understanding of coastal hazards and risk, and local knowledge and issues.
- Build an understanding of the roles and responsibilities, and the guiding principles.
- Ensure that the *Risk and Vulnerability Assessment* includes important assets and values that have been identified by the community[8].
- Identify community values in order to create community objectives and understand community aspirations.
- Seek community input to any adaptation options that are missing from the *Catalogue of Coastal Hazard Adaptation Options*[8].

We will also seek the views of the wider community who are interested.

## Technical analysis

The STAG with input from Council staff will prepare information for the Coastal Panel to consider. This range of work might include:

- Analysing community values in order to develop draft community objectives. The Coastal Panel will be involved in this analysis.
- Incorporating community input to the *Risk and Vulnerability Assessment* and identifying priority locations where short-term impacts of coastal hazards are anticipated.
- Establishing a range of example high-level adaptation pathways (as can be seen in the examples on the next page), signals, triggers and thresholds for Council infrastructure.
- Preliminary assessment of adaptation options to consider their effectiveness, feasibility and environmental impact, and whether they align with the guiding principles. The types of questions here are:

**Effectiveness**

**Will the option effectively address risks and vulnerabilities of the area?**

**Environmental**

**Are the environmental impacts acceptable?**

**Feasibility**

**Are there legal, technical or other requirements that present significant implementation barriers?**

**Guiding principles**

**Does the option align with the guiding principles?**

It is highly unlikely that options which are not sufficiently effective or feasible, will be considered when creating adaptation pathways.

[8]More information about the *Risk and Vulnerability Assessment* can be found on page 18 of this document.

Below, are just two examples of what high-level pathways could look like. Please note that these are not based on any real life scenario.

In Example 1 under a 'hold the line' pathway, we attempt to mitigate the effects of coastal hazards initially with one or more of the potential adaptation options listed under the accommodation approach. Once the pre-determined signals and triggers have been met (for example, a specified sea level rise is reached), this example shows a move to a protection approach with a different set of possible adaptation options. However, a 'hold the line' pathway in a different location could start with a different approach and utilise different option types at different points in time.

In Example 2, a 'work with nature' pathway could utilise environmentally driven accommodate and avoid approaches at the same time. Once the pre-determined signals and triggers have been met, this example shows a move to protect and at the next decision point, a move to managed retreat. Again, this is just one example of what a 'work with nature' pathway could look like, but it is not the only possible combination of option types and potential options.

You can see more about the adaptation types and options in the *Catalogue of Coastal Hazard Adaptation Options.*

## What may example high level pathways in one priority location look like?

Example 1:

| Strategy: Hold the line | | | | | | | |
|---|---|---|---|---|---|---|---|
| Option type: | Accommodate | Signal | Trigger | Protect | Signal | Trigger | Protect |
| Potential options: | Groundwater mgmt. ($: Medium – Extreme)<br>Stormwater mgmt. ($: Medium - Extreme)<br>Adaptable buildings ($: Low – Medium)<br>Flood proofing buildings ($: Low - Medium) | | | Shore nourishment ($: Medium)<br>Dune regeneration ($: Medium)<br>Wetland enhancement ($: Low)<br>Detached breakwater ($: High) | | | Seawall ($: High)<br>Revetment ($: High)<br>Stopbank ($: Medium) |

Example 2:

| Strategy: Work with nature | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Option type: | Avoid + Accommodate | | Signal | Trigger | Protect | Signal | Trigger | Retreat |
| Potential options: | Land use restrictions ($: Low) | Groundwater mgmt. ($: Medium – Extreme)<br>Stormwater mgmt. ($: Medium - Extreme) | | | Shore nourishment ($: Medium)<br>Dune regeneration ($: Medium)<br>Riparian management ($: Medium) | | | Property acquisition ($: Medium - High) |

**Time**

### Understanding mātauranga Māori and rūnanga values

A wider understanding of mātauranga Māori and rūnanga values will be woven through the adaptation planning process. We will be seeking rūnanga feedback on examples of high-level adaptation pathways. Rūnanga will, if they wish, assess options against their values.




**Are the impacts on, or consequences for, land, assets, resources and other taonga acceptable to rūnanga?**

### Coastal Panel analysis

The Coastal Panel will start to develop possible adaptation pathways. To help them achieve this, they are likely to undertake a range of work which might include:

- Considering the *Risk and Vulnerability Assessment.*
- Considering any general signals, triggers and thresholds prepared by the STAG.
- Considering the existing information on effectiveness, feasibility, environmental, guiding principles and mana whenua values.
- Considering how well adaptation options support community objectives.




**Does the option achieve the community objectives?**

We are likely to ask the Coastal Panel to draft high-level adaptation pathways to test with the wider community. These high-level adaptation pathways could include recommended options, potential benefits and impacts of these options, some high-level costings, and suggestions for ways the pathways could be funded and implemented.

## Further community engagement about the Adaptation Area

We need to continue to check in with the wider community. Further engagement is likely to include testing the high-level adaptation pathways with the community, to get their feedback.

## Coastal Panel analysis

It is intended that the Coastal Panel will narrow things down to a preferred pathway. To help them achieve this, the Coastal Panel might consider matters that include the following:

- Feedback gathered from community-wide engagement on possible high-level adaptation pathways;
- The financial implications of the identified pathways including capital and maintenance/ongoing costs;
- The guiding principles as outlined in this document;
- Long-term sustainability;
- Flexibility;
- Effectiveness;
- Environmental impacts;
- Impacts on mana whenua;
- Social impacts; and
- Alignment with community objectives.

We intend to ask the Coastal Panel to identify a preferred pathway, along with recommended funding arrangements for implementation and we will then aim to check back in with the wider Adaptation Area to understand their views on this pathway.

## Council makes final decision

Ultimately, it's the Council that makes the final decision on adaptation pathways that have been through this process.

Once adaptation pathways are decided by Council, the implementation phase begins. If public funding needs to be allocated, then this will be proposed by Council staff via an Annual Plan or Long Term Plan process. It's important to be aware that some adaptation options may not need to be implemented for some time, and may therefore be scheduled for delivery in 10 or even 20 years' time.



# Supporting information

**You can view this information at:**

**ccc.govt.nz/adapting-to-coastal-hazards**

## Coastal Hazard Assessment 2021

The Council engaged Tonkin + Taylor to assess three main coastal hazards; coastal flooding, erosion and rising groundwater for the entire Christchurch district. Good planning requires the best available data, and although there are uncertainties, the data will allow us to broadly understand how the hazards will change in the future and what areas may be impacted, to support sound adaptation planning discussions with communities and robust decision making by the Council.

## Risk and Vulnerability Assessment

The Risk and Vulnerability Assessment, created in collaboration with the University of Canterbury and Urban Intelligence, identifies which assets and values are at most immediate risk to the coastal hazards identified in the Coastal Hazards Assessment, so that we can prioritise where adaptation planning will occur. The Risk and Vulnerability Assessment will not be complete until the community has had a chance to provide feedback on whether the community assets and values are accurate, inclusive and representative.

The Risk and Vulnerability Assessment seeks to answer the following key questions:

- What assets and values are at risk from each coastal hazard, and what is their level of exposure?
- What are the likely consequences of exposure (i.e. number of people and assets affected, social and economic disruption, damage and losses)?
- What cascading, dependent or flow on effects might occur (e.g. roads, impact on community services)?
- When are these impacts likely to occur?
- Where is the most immediate and severe risk – and therefore priority for adaptation planning?

## Management Framework

This document outlines the international, national and local level statutory and non-statutory context for the Council's coastal hazards planning activity. At a broader level, it also outlines the roles and responsibilities of territorial and regional authorities in relation to coastal hazards caused by climate change.

## Catalogue of Coastal Hazard Adaptation Options

This document is a literature review that provides contextual information on a wide range of overarching adaptation strategies and possible adaptation options for low-lying inland and coastal communities. This review is not intended to be the sole tool for identifying potential adaptation options or an exhaustive list of all available adaptation options. Instead, it is intended to inform and support the identification of suitable adaptation options for consideration in the development of adaptation pathways for low-lying inland and coastal communities in the Christchurch district.

# Coastal Hazards District Plan Change

Alongside the Coastal Hazards Adaptation Planning programme, a Coastal Hazards Plan Change to give effect to the New Zealand Coastal Policy Statement and meet our statutory obligations is also being carried out.

The scope of the plan change is to better manage future development, redevelopment, subdivision and changes in land use. It will introduce objective(s), policies and methods to the Christchurch District Plan that apply to the full extent of the district.



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