# Selwyn District Plan Review

Review of Climate Change in Second Generation Plans

Prepared for:
**Selwyn District Council**

Prepared by:
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# Sign-off Sheet

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# 1 Introduction

Selwyn District Council (SDC) are currently undertaking a District Plan Review. Section 7(i) of the Resource Management Act 1991 (the RMA) requires that particular regard is had to the effects of climate change and this is reflected in the provisions of the Canterbury Regional Policy Statement and the New Zealand Coastal Policy Statement; to which SDC's new district plan must give effect.

To gain an understanding as to how other second generation district plans have addressed climate change and whether these provide learnings for the new Selwyn District Plan, Stantec New Zealand Ltd (Stantec) has been engaged by SDC to undertake this review (reference Scope of Works NH002).

As well as summarising the findings of the review of the other district plans, this report also identifies any relevant climate change provisions from the Mahaanui Iwi Management Plan, including climate change related implementation methods relating to local authorities and their planning responsibilities.

# 2 Review of Second Generation Plans

## 2.1 Overview and methodology

Five second generation district plans have been reviewed to identify the following:

- Any objectives and policies which provide specific planning direction on how the management of the development, use and subdivision of land will have regard to the effects of climate change;
- Any permitted or controlled activity standards, matters of control and discretion, and assessment criteria relating to the effects of climate; and
- Any climate change metrics and relevant mapping (statutory and non-statutory) of natural hazards and the evidential basis including technical investigations to support the mapping, metrics and provisions.

The plans that have been reviewed are:

- Auckland Unitary Plan (Partly Operative)[1]
- Christchurch District Plan[2]
- Hamilton District Plan (Operative in Part)[3]
- Proposed Hurunui District Plan (as amended by decisions 2016)[4]
- Ashburton District Plan[5]

Table 2-1 below provides a reference/look up table of the various provisions that have been identified as part of this review, while the specific text of each identified provision is replicated in full within Table 2-3.

[1] http://unitaryplan.aucklandcouncil.govt.nz/pages/plan/Book.aspx?exhibit=AucklandUnitaryPlan_Print

[2] http://districtplan.ccc.govt.nz/pages/plan/book.aspx?exhibit=DistrictPlan

[3] http://www.hamilton.govt.nz/our-council/council-publications/districtplans/PODP/Pages/default.aspx

[4] http://www.hurunui.govt.nz/forms-and-documents/district-plan-review/decisions-on-submissions-2016/

[5] http://www.ashburtondc.govt.nz/our-services/planning-guidance-and-resource-consents/district-plan/Pages/default.aspx

**Table 2-1: Reference Table**

| Plan | Provision Reference | Title/Topic |
|---|---|---|
| Auckland Unitary Plan (Partly Operative) | Introduction E36.1 | Natural hazards and flooding |
| | Objectives E36.2(1-2) | Natural hazards |
| | Objective E38.2(10) | Subdivision - urban |
| | Objective E39.2(17) | Subdivision - rural |
| | Policies E36.3(1,3,5,6,8) | Natural hazards |
| | Policies E38.3(25,26) | Subdivision - urban |
| | Policies E39.3(22,23) | Subdivision - rural |
| | Rule table E36.4.1 | Natural hazards |
| | Standard E36.6.1.1 | Habitable rooms in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise |
| | Standard E36.6.1.13 | Infrastructure in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise |
| | Rule table E38.4 | Subdivision - urban |
| | Standard E38.8.1.1 | Site shape factor in residential zones |
| | Standard E38.9.1.1 | Site shape factor in business zones |
| | Rule table E39.4 | Subdivision - rural |
| | Standard E39.6.1.1 | Specified building area |
| | Matters of discretion E36.8.1 | Natural hazards |
| | Matters of discretion E38.12.1 | Subdivision - urban |
| | Matters of discretion E39.8.1 | Subdivision - rural |
| | Assessment criteria E36.8.2 | Natural hazards |
| | Assessment criteria E39.8.2 | Subdivision - rural |
| | Special information requirements E36.9 | Natural hazards |
| | Definitions Chapter J | Coastal storm inundation area one per cent AEP plus 1m sea level rise (CSI1)<br>Flood plain |
| Christchurch District Plan | Introduction 5.1 | Natural hazards |
| | Policy 5.2.2.2.1 | Natural hazards (flooding) |
| | Policy 11.2.1.3 | Utilities and Energy (renewable electricity) |
| | Rule 5.4.1 | Activities and earthworks in the Flood Management Area |
| | Standard 5.4.1.2 | Minimum floor area certificate |
| | Standard 5.4.2.2 | Minimum floor level |
| | Standard 5.4.3.2 | Minimum floor area certificate |
| | Matters of discretion 5.4.3.3 | Activities and earthworks in the Waimakariri Flood Management Area |

| Plan | Provision Reference | Title/Topic |
|---|---|---|
| | Matters of discretion 5.4.5.2 | Activities and earthworks in the Flood Ponding Management Area |
| | Matters of discretion 6.6.7.1 | Natural hazards (Water body setbacks) |
| | Matters of discretion 13.9.6 | Clearwater Golf Resort and Whisper Creek Golf Resort |
| Hamilton District Plan (Operative in Part) | Policy 2.2.12c | Strategic Framework - Resource Efficiency |
| | Policy 22.2.1a | Natural hazards |
| | Policy 25.13.2.3e | Three Waters |
| | Information Requirements 1.2.2.6b | Information requirements for Full ICMPs and Sub-catchment ICMPs for Greenfield Areas |
| Proposed Hurunui District Plan | Introduction 7.1 | Energy |
| | Introduction 15.1 | Natural hazards |
| | Issue 7.2.1 | Energy |
| | Policy 4.5 | Settlements |
| | Policy 7.2 | Energy |
| | Policy 15.8 | Natural hazards |
| Ashburton District Plan | Introduction 14.1.1 | Utilities, Energy and Designations |
| | Issue 14.2.3 | Utilities, Energy and Designations |

## 2.2 Outcome of Review

Table 2-2 below contains the various provisions from the five second generation plans which provide specific planning direction on how the management of the development, use and subdivision of land will have regard to the effects of climate change. The provisions have been aligned in terms of the type of provision or location with the plan (introduction/background, issues, objectives, policies, standards, matters, assessment criteria, information requirements and definitions) and aligned, where possible, in terms of the topic (i.e. natural hazards).

Please note only provisions with direct reference to climate change (including sea level rise) have been included as these plans include additional provisions on natural hazards in general.

**Table 2-2 Review of Second Generation Plans**

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
|---|---|---|---|---|---|---|
| **Introduction / Background** | **E36. Natural hazards and flooding**<br>**E36.1. Background**<br>Auckland is affected by natural hazards including:<br>• those that occur frequently such as flooding, coastal erosion (including the effects of sea level rise), freshwater erosion and land instability; and<br>• those that occur less frequently such as wildfires, volcanic activity, tsunami, earthquakes and meteorological hazards such as cyclones, tornados and drought.<br>All of these hazards can affect people, property and the wider environment.<br>The risk that these natural hazards pose is made up of factors including:<br>• the nature, magnitude and extent of the hazard;<br>• the anticipated frequency or probability of the hazard event occurring; and<br>• the exposure and vulnerability of the environment to the hazard.<br>Decisions on how to avoid or mitigate natural hazards can affect not only the subject site but also neighbouring properties and the wider environment, and may unintentionally exacerbate the risk. Risk assessment is a key means to identify and understand risks, and to determine which aspects of risk can be managed through appropriate land use planning tools and development methods. Both current and future risks (including the effects of climate change such as sea level rise) need to be considered.<br>A flexible risk-based approach has been taken to address the risks associated with natural hazards. A risk management approach applies to existing development and infrastructure while a risk reduction (including avoidance where appropriate) approach applies to development of greenfield land.<br>The Plan has defined criteria to identify land which may be subject to natural hazards. The Plan requires the use of the best information available to identify greenfield land or land which is proposed for redevelopment which may be subject to natural hazards. This includes hazard maps, databases and reports held by the | **5 Natural Hazards**<br>**5.1 Introduction**<br>a. This introduction is to assist the lay reader to understand how this chapter works and what it applies to. It is not an aid to interpretation in a legal sense.<br>b. The provisions in this chapter give effect to the Chapter 3 Strategic Directions Objectives.<br>c. Natural hazards are defined in the Resource Management Act 1991 as: any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.<br>d. This chapter identifies the ways in which the impacts from a range of natural hazards are managed, particularly in relation to the use, development and maintenance of land, buildings and infrastructure.<br>e. Natural hazard risk can arise from:<br>i. intense rainfall events causing flooding from rivers, streams, overland flow and lakes;<br>ii. earthquakes;<br>iii. liquefaction;<br>iv. slope instability, being cliff collapse, rockfall or boulder roll, and mass movement;<br>v. tsunami;<br>vi. inundation from the sea and storm surge;<br>vii. coastal erosion;<br>viii. fire;<br>ix. exacerbation of some of the hazards above through climate change and sea level rise; and<br>x. multiple hazards consisting of combinations of the above.<br>f. The primary approach to managing natural hazards in this District Plan is to take what is called a "riskbased" approach. Such an approach | | **7 – Energy**<br>**7.1 Introduction**<br>Under section 7 of the RMA, the Council must have particular regard to energy efficiency, climate change and the benefits to be derived from the use and development of renewable energy. The RMA defines renewable energy as energy produced from solar, wind, hydro, geothermal, biomass, tidal, wave, and ocean current sources. The Government's target is for 90% of New Zealand's electricity generation to be from renewable energy resources by 2025. To achieve this, the Government has put in place a National Policy Statement for Renewable Electricity Generation (NPSREG). The District Plan must give effect to this NPS. In order to meet the Government's target it will be necessary to increase the output capacity of renewable electricity generation through the development of new renewable energy generation activities along with the protection of output from existing activities.<br>…<br>**15 - Natural Hazards**<br>**15.1 Introduction**<br>Natural hazards arise through the impact of natural occurrences on human life and property. The primary events that give rise to natural hazards within the district are events such as storms and the resulting flooding; snow and high winds; earthquakes and the associated damage from ground deformation, liquefaction, subsidence and earth shaking; climate change and the associated increase in sea level, and extreme weather events, which in turn can cause flooding, drought or an increase in wildfires.<br>The negative effects of natural hazards can generally best be managed by avoiding development in areas which can be subject to natural hazards. However, it is recognised that all of the district, to a greater or lesser extent, can be subject to natural hazards. While avoidance may be the preferred option in many cases, in other situations mitigating the effects of natural hazards will be the only feasible option to ensure | **14: Utilities, Energy and Designations**<br>**14.1 Introduction**<br>**14.1.1 Legislative Context**<br>The Council is required to have particular regard to energy efficiency, the effects of climate change, and the benefits to be derived from the use and development of renewable energy under section 7 of the Act.<br>The Council is also required to give effect to any National Policy Statement. The National Policy Statement on Electricity Transmission came into force in 2008 and applies to "the need to operate, maintain, develop and upgrade the electricity transmission network". It has the stated objective to recognise the national significance of the electricity transmission network by facilitating the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources to meet the needs of present and future generations, while: managing the adverse environmental effects of the network; and managing the adverse effects of other activities on the network.<br>A number of the organisations that provide and operate utilities have status as requiring authorities under the Act and are able to provide for their utility by designation. Requiring authorities include a Minister of the Crown, a local authority or an approved Network Utility Operator undertaking one of the range of activities mentioned above.<br>Where a utility is provided by way of designation the rules of the Plan will not apply to that activity however, there may be specific conditions relating to the operation or design of the work or project which will have the effect of rules. Once a site is designated it may not be used for any other activity (including permitted activities within the underlying zone) without the consent of the requiring authority.<br>Details relating to designations are provided at the end of this section, including the schedule of designations (Appendix 14-1) that apply within the district and the conditions that apply to | All plans except Hamilton have limited references to climate change and/or sea level rise within the introduction/background sections of various plan chapters. |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
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| | Council. The level of detail and the quality of this information is variable. This affects the Council's ability to identify and map land that may be subject to natural hazards. At this time, the provisions in the Plan are focussed on the following hazards:<br>• coastal erosion;<br>• coastal storm inundation;<br>• flooding;<br>• land instability; and<br>• wildfires.<br>The Council is working to gather, assess and refine information so that a more comprehensive range of natural hazards can be assessed and, as appropriate, subdivision, use and development can be better managed through provisions in the Plan. | considers various scales of a particular natural hazard event (for example different magnitude earthquakes and different intensities and durations of rainfall events), together with the likelihood of that particular event occurring and the effects that it would cause, particularly on people and property.<br>… | | the health, safety and wellbeing of the district's residents. | some designations. Designations are also shown on the Planning Maps. | |
| **Issue** | | | | **7 – Energy**<br>**7.2 Issues**<br>1. The need to reduce the effects of climate change by recognising the significance of electricity generation from renewable energy resources. | **14: Utilities, Energy and Designations**<br>**14.2.3 Renewable Energy**<br>Under Section 7 of the Act, Council must have particular regard to energy efficiency, climate change, and the benefits of the use and development of renewable energy. In achieving its wider economic growth objectives, the Government has confirmed its commitment to increasing the proportion of electricity generated from renewable sources in order to improve security of supply, reduce New Zealand's greenhouse gas emissions and to achieve environmentally responsible energy use.<br>… | Only the Hurunui and Ashburton plans have specific references to climate change within their issues. However, it is noted the Ashburton plan has no further references or provisions relating to climate change.<br>In addition, it is noted that these issues allude to climate change being a matter which needs to be reduced/stopped as opposed to managed through the provisions of the plan. |
| **Objectives** | **E36 Natural Hazards**<br>**Objective E36.2(1)** Subdivision, use and development outside urban areas does not occur unless the risk of adverse effects to people, property, infrastructure and the environment from natural hazards has been assessed and significant adverse effects are avoided, taking into account the likely long-term effects of climate change.<br>**Objective E36.2(2)** Subdivision, use and development, including redevelopment in urban areas, only occurs where the risks of adverse effects from natural hazards to people, buildings, infrastructure and the environment are not increased overall and where practicable are reduced, taking into account the likely long term effects of climate change.<br>**E38 Subdivision – Urban**<br>**E38.2(10) Subdivision:**<br>(a) within urban and serviced areas, does not increase the risks of adverse effects to people, property, infrastructure and the environment from natural hazards; | | | | | Only the Auckland Unitary Plan contains objectives that make reference to climate change.<br>These objectives require certain subdivision, use and development to take into account the likely long term effects of climate change. |

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| | (b) avoids, where possible, and otherwise mitigates, adverse effects associated with subdivision for infrastructure or existing urban land uses; and<br>(c) maintains the function of flood plains and overland flow paths to safely convey flood waters, while taking into account the likely long term effects of climate change.<br><br>**E39 Subdivision – Rural**<br>**E39.2(17) Subdivision:**<br>(a) outside of urban and serviced areas avoids adverse effects to people, property, infrastructure and the environment from natural hazards;<br>(b) avoids where possible, and otherwise mitigates, adverse effects associated with subdivision for infrastructure or existing urban land uses; and<br>(c) maintains the function of flood plains and overland flow paths to safely convey flood waters while taking into account the likely long term effects of climate change; | | | | | |
| **Policies** | **E36 Natural Hazards**<br>**Policy E36.3(1)** Identify land that may be subject to natural hazards, taking into account the likely effects of climate change, including all of the following:<br>(a) coastal hazards (including coastal erosion and coastal storm inundation, excluding tsunami);<br>(b) flood hazards;<br>(c) land instability; and<br>(d) wildfires.<br>**Policy E36.3(3)** Consider all of the following, as part of a risk assessment of proposals to subdivide, use or develop land that is subject to natural hazards:<br>(a) the type, frequency and scale of the natural hazard and whether adverse effects on the development will be temporary or permanent;<br>(b) the type of activity being undertaken and its vulnerability to natural hazard events;<br>(c) the consequences of a natural hazard event in relation to the proposed activity;<br>(d) the potential effects on public safety and other property;<br>(e) any exacerbation of an existing natural hazard risk or the emergence of natural hazard risks that previously were not present at the location;<br>(f) whether any building, structure or activity located on land subject to natural hazards near the coast can be relocated in the event of severe coastal erosion, inundation or shoreline retreat;<br>(g) the ability to use non-structural solutions, such as planting or the retention | **5.2.2.2 Policy for managing risk from flooding**<br>**5.2.2.2.1 Policy Flooding**<br>a. Map hazard risk for the Flood Management Area based on:<br>i. a modelled 0.5% AEP (1 in 200year) rainfall event plus a 5% AEP (1 in 20year) tide event plus 250mm freeboard; OR a modelled 5% AEP (1 in 20year flood event) plus a 0.5% AEP (1 in 200year) tide event plus 250mm freeboard; OR 11.9m above Christchurch City Council Datum (the maximum 200year tidal contour) plus 250mm freeboard; whichever is the greater; and<br>ii. allowance for 1 metre of sea level rise and an increase in rainfall intensity by 16% through to 2115 as a result of climate change; and<br>iii. a maximum buffer extension of the modelled rainfall event areas by 60 metres in a north/south and east/west direction.<br>b. Avoid subdivision, use or development in the high flood hazard management area where it will increase the potential risk to people's safety, wellbeing and property.<br>c. Avoid activities locating where they could undermine the integrity of the Waimakariri River primary stopbank system, and restrict activities locating where they could undermine the integrity of the Waimakariri River secondary stopbank system.<br>d. Maintain the flood storage capacity and function of natural floodplains, wetlands and ponding areas, including | **22 Natural Hazards**<br>**Policy 22.2.1a**<br>Subdivision, use and development shall be managed to reduce the risks from natural hazards to an acceptable level, including by:<br>i. Ensuring risk and likely effects are assessed for new activities on land subject to natural hazards.<br>ii. Reducing the risk to which existing use and development is exposed to tolerable or acceptable levels where these risks are considered unacceptable.<br>iii. Controlling new use and development in areas subject to significant natural hazards to ensure that the natural hazard risk does not exceed acceptable levels.<br>iv. Taking a precautionary approach by minimising the vulnerability of new development adjoining natural hazard areas.<br>v. Recognising that sites may be subject to multiple hazards and the potential cumulative effect this may create.<br>vi. When mitigation options are being considered in response to unacceptable hazard risks, giving priority to the use of non-structural solutions over new construction of natural hazard protection works or structures.<br>vii. Recognising, maintaining or enhancing the role of natural features to avoid or minimise natural hazards.<br>viii. Ensuring new activities do not create new or exacerbate existing natural hazards. | **15 - Natural Hazards**<br>**Policy 15.8**<br>To recognise that climate change could alter the frequency and duration of some natural hazard events. Any mitigation works should take into consideration the need to be precautionary given the uncertainties as to the magnitude of effects from climate change. New subdivision, use and development should consider the consequences of a mean sea-level rise of at least 0.8m relative to the 1980-1999 average.<br>*Explanation*<br>The majority of the international science community now agrees that global climate change is occurring. However, there is still uncertainty as to the magnitude of the future effects of this climate change and the extent to which human activities are causing this change in the global climate system. Despite this uncertainty the Council recognises that climate change can exacerbate some natural hazards like flooding and sea water inundation, therefore mitigation measures that are developed are constructed in such a way that they take into account the likely effects of this change. | | All plans except Ashburton have policies with references to climate change and/or sea level rise. Natural hazards is the only topic where each of these four plans have policies within their respective chapters.<br>Of these four plans, all except Hamilton contain some form of climate change metric within their policies:<br>- sea level rise of 1m (Auckland)<br>- allowance for 1 metre of sea level rise and an increase in rainfall intensity by 16% through to 2115 as a result of climate change (Christchurch)<br>- consider the consequences of a mean sea-level rise of at least 0.8m relative to the 1980-1999 average (Hurunui) |

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| | or enhancement of natural landform buffers to avoid, remedy or mitigate hazards, rather than hard protection structures;<br>(h) the design and construction of buildings and structures to mitigate the effects of natural hazards;<br>(i) the effect of structures used to mitigate hazards on landscape values and public access;<br>(j) site layout and management to avoid or mitigate the adverse effects of natural hazards, including access and exit during a natural hazard event; and<br>(k) the duration of consent and how this may limit the exposure for more or less vulnerable activities to the effects of natural hazards including the likely effects of climate change.<br>**Coastal hazards (including coastal erosion and coastal storm inundation)**<br>**Policy E36.3(5)** Ensure that subdivision, use and development on rural land for rural uses and in existing urban areas subject to coastal hazards avoids or mitigates adverse effects resulting from coastal storm inundation, coastal erosion and sea level rise of 1m through location, design and management.<br>**Policy E36.3(6)** Avoid subdivision, use and development in greenfield areas which would result in an increased risk of adverse effects from coastal hazards, taking account of a longer term rise in sea level.<br>**Policy E36.3(8**) Ensure that when locating any new infrastructure in areas potentially subject to coastal hazards consider, where appropriate, an adaptive management response taking account of a longer term rise in sea level. | the Henderson's Basin, Cashmere Stream Floodplain, Hoon Hay Valley, Cashmere Worsleys Ponding Area, Cranford Basin, and Lower Styx Ponding Area1.<br>e. Except for filling required to meet minimum floor levels, ensure that filling in urban areas at risk of flooding in a major flood event does not transfer flooding risk to other people, property, infrastructure or the natural environment.<br>f. Reduce potential flood damage by ensuring floor levels for new buildings or additions to buildings, except those unlikely to suffer material damage, are above flooding predicted to occur in a major flood event, including an allowance for appropriate freeboard. | ix. Having regard to the actual or potential effects of climate change on the occurrence or severity of natural hazards.<br>x. Recognising that providing for redevelopment resulting in an increased level of development on site may create opportunities to reduce the overall level of existing risk.<br>*Explanation*<br>The potential consequences of allowing activities within areas affected by natural hazard events vary according to the nature and scale of the proposed activity. The hazard areas identified within this District Plan are affected by potentially significant hazards. Most activities within these areas will involve the preparation of a Risk Assessment Report as part of information requirements for building and resource consents.<br>Climate change can have the effect of increasing the occurrence or severity of natural hazards. When assessing risk of any activity, the effects of climate change should be considered. In addition to Ministry for Environment guidance reports, the Hamilton City Infrastructure Technical Specifications contain guidance on determining the effects of climate change on rainfall and how to reflect this in the design of stormwater infrastructure.<br>Some land uses have the effect of concentrating people into defined locations. Concentrating people in locations (e.g. residential activities at urban densities) that may be subject to natural hazards creates a greater risk than if the land was used only for lower population density uses.<br>Some activities are vital for emergency response and disaster recovery, including hospitals, emergency service facilities, and lifeline utilities. These activities need to be located in areas where their exposure to natural hazards is minimised. In some situations it will be impossible to provide lifeline utility services to the City without entering a hazard area (e.g. Three Waters infrastructure or the strategic transport network crossing the Waikato River). Where it has been established that there is no reasonable or practical alternative that would avoid a hazard area, then the activity should be allowed to proceed in a manner that minimises the level of risk.<br>Some activities are not sensitive to the effects of natural hazards and are considered low risk. These should be allowed to occur in hazard areas. For example outdoor recreational spaces and their associated activities. This ensures that the land is still able to contribute towards the functioning of the | | | |

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| | | | City while minimising the consequences of a natural hazard event. | | | |
| | **E38 Subdivision – Urban**<br>**Policy E38.3(25)** Avoid reducing the width of esplanade reserve or strip, or the waiving of the requirement to provide an esplanade reserve or strip, except where the following apply:<br>(a) safe public access and recreational use is already possible and can be maintained for the future;<br>(b) the maintenance and enhancement of the natural functioning and water quality of the adjoining sea, river or other water body will not be adversely affected;<br>(c) the land and water-based habitats on, and adjoining, the subject land area will not be adversely affected;<br>(d) the natural values, geological features and landscape features will not be adversely affected;<br>(e) any scheduled historic heritage places and sites and places of significance to Mana Whenua will be adversely affected;<br>(f) it can be demonstrated that the reduced width of the esplanade reserve or strip is sufficient to manage the risk of adverse effects resulting from natural hazards, taking into account the likely long term effects of climate change;<br>(g) it can be demonstrated that a full width esplanade reserve or strip is not required to maintain the natural character and amenity of the coastal environment;<br>(h) a reduced width in certain locations can be offset by an increase in width in other locations or areas which would result in a positive public benefit, in terms of access and recreation;<br>(i) restrictions on public access are necessary to ensure a level of security for business activities in limited circumstances having regard to the policies in B8.4 relating to public access and open space in the coastal marine area; or<br>(j) direct access to the sea or other water body is required for a business activity in limited circumstances.<br>**Policy E38.3(26)** Require esplanade reserves rather than esplanade strips unless the following apply:<br>(a) land has limited conservation and recreational value;<br>(b) conservation and historic heritage values that are present can be adequately protected in private ownership;<br>(c) the opportunity to acquire an esplanade reserve is unlikely to arise but continuity of access is desirable; | | **2 Strategic Framework - Resource Efficiency**<br>**Policy 2.2.12c**<br>Development is designed to consider and adapt to the expected effects of climate change.<br>*Explanation*<br>Efficient use and development of resources is a principle of the Act and contributes to sustainable management. The Regional Policy Statement seeks for the use and development of natural and physical resources to occur at a rate that is efficient and minimises waste. In accordance with this, the City's Access Hamilton and Environmental Sustainability Strategies emphasise that development in Hamilton needs to be managed sustainably. This objective and policies provides the strategic framework to ensure Hamilton can achieve a more sustainable and quality urban environment. It is recognised with the design of buildings that it will not always be possible to adapt to a range of uses. These include specialised buildings for manufacturing and dwellings. | **4 - Settlements**<br>**Policy 4.5**<br>To recognise that some settlements have been developed in locations subject to natural hazards, especially flooding and coastal erosion, which may be exacerbated by climate change, and to discourage further development or investment of public resources in these areas, particularly seaward of coastal hazard lines. | | |

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|---|---|---|---|---|---|---|
| | (d) creation of esplanade strips can secure public benefits and resource management objectives without alienating land from private ownership;<br>(e) land is subject to natural hazards or stability issues taking into account the likely long term effects of climate change; or<br>(f) a marginal strip of at least 20 metres under the Conservation Act 1987 has not been set aside on land that is Treaty Settlement Land | | | | | |
| | **E39 Subdivision – Rural**<br>**Policy E39.3(22)** Avoid reducing the width of esplanade reserves or strips, or the waiving of the requirement to provide an esplanade reserve or strip, except where the following apply:<br>(a) safe public access and recreational use is already possible and can be maintained for the future;<br>(b) the maintenance and enhancement of the natural functioning and water quality of the adjoining sea, river or other water body will not be adversely affected;<br>(c) the land and water-based habitats on and adjoining the subject land area will not be adversely affected;<br>(d) the natural values, geological features and landscape features will not be adversely affected;<br>(e) any Scheduled Historic Heritage Places and Sites and Places of Significance to Mana Whenua will not be adversely affected;<br>(f) it can be demonstrated that the reduced width of the esplanade reserve or strip is sufficient to manage the risk of adverse effects resulting from natural hazards, taking into account the likely long-term effects of climate change;<br>(g) it can be demonstrated that a full width esplanade reserve or strip is not required to maintain the natural character and amenity of the coastal environment;<br>(h) a reduced width in certain locations can be offset by an increase in width in other locations or areas, which would result in a positive public benefit in terms of access and recreation;<br>(i) restrictions on public access are necessary to ensure a level of security for business activities in limited circumstances having regard to Policy B8.4.2(3) relating to public access in the coastal marine area; or<br>(j) direct access to the sea or other water body is required for a business activity in limited circumstances. | **11 Utilities and Energy**<br>**11.2.1.3 Policy Renewable electricity generation**<br>a. Provide for the operation, maintenance, upgrade and development of utilities that derive or generate electricity through renewable sources by:<br>i. recognising the benefits to people and communities of renewable electricity generation;<br>ii. acknowledging the implications and constraints associated with renewable electricity generation activities, including<br>Locational, operational and technical matters;<br>iii. promoting small and community scale renewable electricity generation activities, such as from solar and wind energy;<br>iv. reducing the use of finite resources for the generation of electricity; and<br>v. recognising the benefits of reducing greenhouse gas emissions that contribute to climate change | **25.13 Three Waters**<br>**Policy 25.13.2.3e**<br>Three Waters infrastructure is designed and constructed to:<br>i. Minimise the effects of urban development on downstream receiving waters and groundwater.<br>ii. Ensure that the capacity, efficiency and sustainability of upstream and downstream infrastructure will not be compromised.<br>iii. Facilitate access, maintenance and operational requirements.<br>iv. Cater for the potential effects of climate change.<br>v. Ensure appropriate standards of public health, safety and amenity.<br>vi. Ensure that surface water runoff is appropriately managed in accordance with the following drainage hierarchy.<br>1. Retention for reuse.<br>2. Soakage techniques.<br>3. Detention and gradual release to a watercourse.<br>4. Detention and gradual release to stormwater reticulation.<br>*Explanation*<br>Three Waters infrastructure is a key component of subdivision, use and development. It needs to be developed sustainably and agreed upon at the planning stage of the development. All new greenfield areas must have a Structure Plan and an Integrated Catchment Management Plan in place before development begins. Integrated catchment management planning is a process whereby the effects of development on all Three Waters infrastructure capacity and the appropriateness and integrity of proposed treatments and reticulation systems and networks are designed to manage the change or intensification and assessed and used to help guide decisions. This objective and policies provide support to the direction in Chapter 2: Strategic Framework and | **7 – Energy**<br>**Policy 7.2**<br>To recognise the value of producing energy from non-renewable sources only where the associated adverse environmental effects are avoided, remedied or mitigated.<br>*Explanation*<br>Some forms of energy production, both renewable and non-renewable, can release greenhouse gases, which are a fundamental cause of human induced climate change. However, in some cases, energy production from non-renewable resources such as burning gases produced from landfill can have negligible or positive effects. | | |

<table>
<tr><th>Provision</th><th>Auckland Unitary Plan<br>(Partly Operative)</th><th>Christchurch District Plan</th><th>Hamilton District Plan<br>(Operative in Part)</th><th>Proposed Hurunui District Plan<br>(as amended by decisions 2016)</th><th>Ashburton District Plan</th><th>Comment</th></tr>
<tr><td></td><td>Policy E39.3(23) Require esplanade reserves rather than esplanade strips unless the following apply:<br>(a) land has limited conservation and recreational value;<br>(b) conservation and historic heritage values that are present can be adequately protected in private ownership;<br>(c) opportunity to acquire an esplanade reserve is unlikely to arise but continuity of access is desirable;<br>(d) creation of esplanade strips can secure public benefits and resource management objectives without alienating land from private ownership;<br>(e) land is subject to natural hazards or stability issues taking into account the likely long term effects of climate change; or<br>(f) a marginal strip of at least 20 metres under the Conservation Act 1987 has not been set aside on land that is Treaty Settlement Land.</td><td></td><td>Chapter 3: Structure Plans to avoid a situation where Three Waters planning occurs independent to land-use planning.<br>The objective and policies also provide direction for minimum requirements for the design of Three Waters infrastructure and services in the absence of an Integrated Catchment Management Plan.<br>Climate change may impact on the frequency and intensity of storm events and other weather extremes such as droughts. The impact of these changes needs to be considered as part of the long term management of the Three Waters.</td><td></td><td></td><td></td></tr>
<tr><td>Rules and standards</td><td>E36 Natural Hazards<br>Table E36.4.1 Activity table<table><tr><td colspan="3">Activities in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1 metre sea level rise (CSI1)</td></tr><tr><td>(A11)</td><td>Additions of habitable rooms up to 25m2 to existing buildings in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise (CSI1)</td><td>P</td></tr><tr><td>(A12)</td><td>Habitable rooms in new buildings and additions of habitable rooms (greater than 25m2) to existing buildings in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise (CSI1) that comply with standard E36.6.1.1</td><td>P</td></tr><tr><td>(A13)</td><td>Habitable rooms in new buildings and additions of habitable rooms (greater than 25m2 ) to existing buildings in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise (CSI1) that do not comply with Standard E36.6.1.1</td><td>D</td></tr><tr><td colspan="3">Infrastructure:<br>• on land which may be subject to coastal erosion;</td></tr></table></td><td>5.4.1 Activities and earthworks in the Flood Management Area<br>5.4.1.1 Permitted activities<br>The activities listed below are permitted activities where the activity is located in the area shown on the Planning Maps as Flood Management Area (other than in a Transport Zone, where the Flood Management Area rules do not apply), if they<br>a. meet the activity specific standards set out in Table 5.4.1.1b.<br>b. Activities may also be restricted discretionary as specified in Rule 5.4.1.5.<br>c. Exemptions relating to this rule can be found in Rule 5.4.1.4.<br>d. For filling or excavation (before 31 December 2018) for repair of land used for residential purposes and damaged by<br>e. earthquakes, see Rule 5.4.4.<br>f. For the purpose of determining appropriate floor levels for P1 and P2, the following models will be used:<br>…<br>Table 5.4.1.1b<table><tr><td colspan="2">Activity</td><td>Activity specific standards</td></tr><tr><td>P1</td><td>New buildings located within the Fixed Minimum Floor Level Overlay, unless specified in</td><td>a. Minimum floor levels shall be the highest of the following:<br>i. flooding predicted to occur in a 0.5% AEP (1 in 200 year) rainfall</td></tr></table></td><td></td><td></td><td></td><td>Only the Auckland and Christchurch plans have rules and associated standards relating to climate change/sea level rise. Both plans refer to various minimum floor level requirements with plus 1m for sea level rise.<br>The Hurunui Plan contains no rules or standards correlating to the specific requirement to consider the consequences of a mean sea-level rise of at least 0.8m relative to the 1980-1999 average.<br>It should be noted that the ‘coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise’ mapping referred to in the rules/information requirements is not part of the Auckland plan. It is available separately on the Auckland Council website through the GeoMaps GIS viewer.<br>In the case of the various Flood Management Areas, in which consideration of sea level rise is required for certain activities, these are identified as natural hazard overlays within the</td></tr>
</table>

<table>
<tr><th>Provision</th><th>Auckland Unitary Plan (Partly Operative)</th><th>Christchurch District Plan</th><th>Hamilton District Plan (Operative in Part)</th><th>Proposed Hurunui District Plan (as amended by decisions 2016)</th><th>Ashburton District Plan</th><th>Comment</th></tr>
<tr>
<td></td>
<td>
<table>
<tr><td colspan="3">• on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP);<br>• in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise (CSI1);<br>• in the 1 per cent annual exceedance probability (AEP) floodplain;<br>• in overland flow paths<br>• infrastructure on land which may be subject to instability</td></tr>
<tr><td>(A52)</td><td>Operation, maintenance, renewal, repair and minor infrastructure upgrading, of infrastructure in areas listed in the heading above that complies with Standard E36.6.1.13</td><td>P</td></tr>
<tr><td>(A53)</td><td>Construction, operation, maintenance, renewal and repair of road network activities within the legal road or road formation width in areas listed in the heading above</td><td>P</td></tr>
<tr><td>(A54)</td><td>Infrastructure within roads or the Strategic Transport Corridor Zone in areas listed in the heading above</td><td>P</td></tr>
<tr><td>(A55)</td><td>Operation, maintenance, renewal, repair and minor infrastructure upgrading of infrastructure in areas listed in the heading the above that do not comply with Standard E36.6.1.13</td><td>RD</td></tr>
<tr><td>(A56)</td><td>All other infrastructure in areas listed in the heading above not otherwise provided for</td><td>RD</td></tr>
</table>
<br>E36.6. Standards<br>E36.6.1. Permitted activity standards<br>E36.6.1.1. Habitable rooms in new buildings and additions of habitable rooms (greater than 25m2) to existing buildings in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise (CSI1)<br>Finished floor levels of habitable rooms must be above the coastal storm (1) inundation 1 per cent annual exceedance probability (AEP) plus 1 metre sea level rise.
</td>
<td>
<table>
<tr><td></td><td>P5, P6, P7, P8 or P9 in Rule 5.4.1.1.</td><td>event concurrent with a 5% AEP (1 in 20 year) tidal event, including 1 metre sea level rise plus 400mm freeboard, as predicted by the relevant Council model and version identified in Table 5.4.1.1a; or<br>ii. flooding predicted to occur in a 0.5% AEP (1 in 200year) tidal event concurrent with a 5% (1 in 20year) rainfall event, including 1m sea level rise plus 400mm freeboard, as predicted by the relevant Council model and version identified in Table 5.4.1.1a; or<br>iii. 12.3 metres above Christchurch City Council Datum.</td></tr>
<tr><td>P2</td><td>Additions to existing buildings which increase the ground floor area of the building located within the Fixed Minimum Floor Level Overlay, unless specified in P6, P7, P8 or P9 in Rule 5.4.1.1.</td><td></td></tr>
</table>
<br>5.4.1.2 Minimum floor level certificate<br>a. For P3 and P4 in Table 5.4.1.1b, new buildings or additions to existing buildings within the Flood Management Area, but outside of the Fixed Minimum Floor Level Overlay shall have a floor level that is greater than or equal to that specified in a Minimum Floor Level Certificate. The Council will issue a Minimum Floor Level Certificate (which will be valid for 2 years from the date of issue) which specifies the design floor level for a building calculated as the highest of the following:<br>i. flooding predicted to occur in a 0.5% AEP (1 in 200 year) rainfall event concurrent with a 5% AEP (1 in 20 year) tidal event, including 1m sea level rise plus 400mm freeboard, as predicted by the most up to date Council model and any relevant field information; or
</td>
<td></td>
<td></td>
<td></td>
<td>Christchurch planning maps.<br>Please note the Hamilton, Hurunui and Ashburton plans all also have various flood hazard information on their planning maps.</td>
</tr>
</table>

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
|---|---|---|---|---|---|---|
| | | ii. flooding predicted to occur in a 0.5% AEP (1 in 200 year) tidal event concurrent with a 5% AEP (1 in 20 year) rainfall event, including 1m sea level rise plus 400mm freeboard, as predicted by the most up to date Council model and any relevant field information; or<br>iii. 12.3 metres above Christchurch City Council Datum. | | | | |
| | *Infrastructure:*<br>*• on land which may be subject to coastal erosion;*<br>*• on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP);*<br>*• in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1 metre sea level rise (CSI1);*<br>*• in the 1 per cent annual exceedance probability (AEP) floodplain;*<br>*• in overland flow paths and*<br>**E36.6.1.13. Operation, maintenance, renewal, repair and minor infrastructure upgrading, of infrastructure in areas listed in the heading above**<br>(1) Minor infrastructure upgrading of infrastructure must comply with the following (where relevant):<br>(a) minor re-alignment, configuration, relocation or replacement of electricity, gas distribution, or telecommunication line, pipe, pole, conductors, cross arms, switches, transformers, cabinets or ancillary<br>structures:<br>(i) that is within 2m of the existing alignment or location; or<br>(ii) that is within 5m of the existing alignment or location when associated with road widening reasons or road safety or electricity clearance reasons.<br>(b) alterations and additions to overhead electricity and telecommunication lines on existing poles:<br>(i) do not increase the number of conductors or wires/lines by more than 100 per cent; or<br>(ii) when installing a new low voltage circuit on an existing pole, the total number of new conductors or wires/lines must not exceed 8, consisting specifically of 4 lines for electricity circuit, 1 hot water pilot line, 1 street light line, and 2 for telecommunication purposes. Where the hot water pilot and street light lines are not required, the maximum number of new conductors must not exceed 6;<br>(iii) the provisions in E36.6.1.13(b)(i) and (ii) above exclude service connections and lateral network connections; | **5.4.2.2 Minimum floor level**<br>a. For Rule 5.4.2.1 P1, new buildings or additions to existing buildings within the Te Waihora/Lake Ellesmere and Wairewa/Lake Forsyth Flood Management Areas shall have a floor level that is greater than or equal to that specified in a Minimum Floor Level Certificate. The Council will issue a Minimum Floor Level Certificate (which will be valid for 2 years from the date of issue) which specifies the design floor level for a building calculated as the highest of the following:<br>i. flooding predicted to occur in a 0.5% AEP (1 in 200year) rainfall event concurrent with a 5% AEP (1 in 20year) tidal event, including 1m sea level rise plus 400mm freeboard, as predicted by the most up to date Council approved model and any relevant field information; or<br>ii. flooding predicted to occur in a 0.5% AEP (1 in 200year) tidal event concurrent with a 5% AEP (1 in 20year) rainfall event, including 1m sea level rise plus 400mm freeboard, as predicted by the most up to date Council approved model and any relevant field information; or<br>iii. 12.3 metres above Christchurch City Council Datum.<br>**5.4.3.2 Minimum floor level certificate**<br>a. For P15 and P16 in Rule 5.4.3.1, new buildings or additions to existing buildings within the Waimakariri Flood Management Area shall have a floor level that is greater than or equal to that specified in a Minimum Floor Level Certificate. The Council will issue a Minimum Floor Level Certificate (which will be valid for 2 years from the date of issue) which specifies the design floor level for a building calculated as the highest of the following:<br>i. flooding predicted to occur in a 0.5% AEP (1 in 200year) rainfall event concurrent with a 5% AEP (1 in 20year) tidal event, including 1m sea level rise plus 400mm freeboard, as predicted by the most up to date Council approved model and any relevant field information; or | | | | |

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|---|---|---|---|---|---|---|
| | (iv) include additional cross arms that do not exceed the length of the existing cross arm by more than 100 per cent, up to a maximum of 4m;<br>(v) additional or replacement electricity and telecommunication lines that do not exceed 30mm in diameter;<br>…<br>**E38.4 Subdivision - Urban**<br>**Table E38.4. Activity table**<br>(A11) Subdivision of land within any of the following natural hazard areas:<br>• one per cent annual exceedance probability floodplain;<br>• coastal storm inundation one per cent annual exceedance probability;<br>• coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise;<br>• land which may be subject to coastal hazards; or<br>• land which may be subject to land instability.) RD<br>**E38.8.1. General standards in residential zones**<br>**E38.8.1.1. Site shape factor in residential zones**<br>(1) Access and manoeuvring must meet the requirements of E27 Transport.<br>(2) All vacant sites must be able to contain a rectangle of 8 metres by 15 metres except the Residential - Terrace Housing and Apartment Buildings Zone must contain a rectangle of 15 metres by 20 metres, to<br>accommodate a building that complies with all applicable standards of the zone and is located outside:<br>(a) the one per cent annual exceedance probability floodplain;<br>(b) land which may be subject to coastal hazards;<br>(c) land affected by coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise;<br>(d) land which may be subject to instability;<br>(e) the protected root zone of trees identified in the Notable Trees Overlay;<br>(f) areas identified as significant ecological areas, outstanding natural features, outstanding natural landscapes, outstanding natural character areas or high natural character areas in the Significant Ecological Areas Overlay, the Outstanding Natural Features Overlay | ii. flooding predicted to occur in a 0.5% AEP (1 in 200year) tidal event concurrent with a 5% AEP (1 in 20year) rainfall event, including 1m sea level rise plus 400mm freeboard, as predicted by the most up to date Council approved model and any relevant field information; or<br>iii. 12.3 metres above Christchurch City Council Datum. | | | | |

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| | and Outstanding Natural Landscapes Overlay, or the Outstanding<br>Natural Character and High Natural Character Overlay.<br>(g) areas identified as scheduled historic heritage places, or sites and places of significance to Mana Whenua in the Historic Heritage Overlay or the sites and Places of Significance to Mana Whenua Overlay;<br>(h) network utilities, including private and public lines;<br>(i) right-of-way easements;<br>(j) area of esplanade reserves required by Standard E38.7.3.2 Subdivision establishing an esplanade reserve;<br>(k) yard setback requirements of the zone including riparian, lakeside or<br>coastal protection yards; and<br>(l) the separation distance from the National Grid Corridor Overlay | | | | | |
| | **E38.9.1. General standards for business zones**<br>**E38.9.1.1. Site shape factor in business zones**<br>(1) All vacant sites must be able to contain a rectangle with an area equal to half the area of the site where the longer sides are no greater than twice the length of the shorter sides to accommodate a building that complies with all applicable controls of the zone and is located outside all of the following:<br>(a) the one per cent annual exceedance probability floodplain;<br>(b) land affected by coastal storm inundation one per cent annual exceedance probability;<br>(c) land affected by coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise;<br>(d) land affected by coastal erosion as identified:<br>(e) land which may be subject to land instability;<br>(f) the protected root zone of trees identified in the Notable Trees Overlay;<br>(g) areas identified as significant ecological areas, outstanding natural features, outstanding natural landscapes, outstanding natural character areas or high natural character areas in the Significant Ecological Areas Overlay, the Outstanding Natural Features Overlay and Outstanding Natural Landscapes Overlay, or the Outstanding Natural Character and High Natural Character Overlay.<br>(h) areas identified as scheduled historic heritage place, or sites and places of significance to Mana Whenua in the | | | | | |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
|---|---|---|---|---|---|---|
| | Historic Heritage Overlay or the Sites and Places of Significance to Mana Whenua Overlay;<br>(i) private and public network utilities;<br>(j) private and public stormwater and wastewater lines;<br>(k) building line restrictions;<br><br>**E39.4 Subdivision - Rural**<br>**Table E39.4. Activity table**<br>(A8) Subdivision of land within any of the following natural hazard areas: • one per cent annual exceedance probability floodplain; • coastal storm inundation one per cent annual exceedance probability; • coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise; • land which may be subject to coastal hazards; or • land which may be subject to land instability — RD<br><br>**E39.6.1. General standards**<br>**E39.6.1.1. Specified building area**<br>(3) The specified building area must meet all of the following:<br>(a) include a single area of at least 2,000m2 clear of all of the following:<br>(i) all yards;<br>(ii) one per cent annual exceedance probability floodplain areas;<br>(iii) land affected by coastal storm inundation one per cent annual exceedance probability;<br>(iv) land affected by coastal storm inundation one per cent annual exceedance probability plus 1m sea level rise;<br>(v) land which may be subject to coastal hazards;<br>(vi) land which may be subject to land instability;<br>(vii) access to all proposed building platforms or areas; and<br>(viii) on-site private infrastructure required to service the intended use of the site.<br>(b) be able to be linked by adequate and appropriate vehicle access to a formed public road;<br>(c) be identified as the only place within the site where dwellings, any accessory buildings, and related parking and manoeuvring areas can be located; and<br>(d) be located outside of the Quarry Buffer Area Overlay. | | | | | |

<table>
<tr><th>Provision</th><th>Auckland Unitary Plan<br>(Partly Operative)</th><th>Christchurch District Plan</th><th>Hamilton District Plan<br>(Operative in Part)</th><th>Proposed Hurunui District Plan<br>(as amended by decisions 2016)</th><th>Ashburton District Plan</th><th>Comment</th></tr>
<tr>
<td>Matters of discretion</td>
<td>
E36 Natural Hazards<br>
E36.8.1. Matters of discretion<br>
Activities on land which may be subject to coastal erosion<br>
(1) for external alterations to existing buildings which increase the gross floor area of the building on land which may be subject to coastal erosion; for all other buildings and structures on land which may be subject to coastal erosion; and for on-site septic tanks, wastewater treatment and disposal systems, effluent disposal fields, underground storage tanks, water tanks or stormwater pipes or soakage fields on land which may be subject to coastal erosion:<br>
(a) the type of activity being undertaken and its vulnerability to natural hazard events including the consequences of a natural hazard event in relation to more or less vulnerable activities;<br>
(b) the likelihood of a natural hazard event occurring and the likely extent of any damage to people, property or the environment taking in to account the likely effects of climate change, including sea level rise;<br>
(c) the effects on landscape and other environmental values, associated earthworks and land form modifications;<br>
(d) the effects on public access; and<br>
(e) the ability to relocate buildings or structures including the proposed duration of occupation of the building or structure within a hazard area, taking into account the long term likely effects of climate change.<br>
Activities on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP)<br>
(2) for external alternations to existing buildings which increase the gross floor area of the building on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP); for all other buildings and structures on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP); for on-site septic tanks, wastewater treatment and disposal systems, effluent disposal fields, underground storage tanks, water tanks or stormwater pipes or soakage fields on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP):<br>
(a) the type of activity being undertaken and its vulnerability to natural hazard events including the consequences of a natural hazard event in relation to more or less vulnerable activities;<br>
(b) the likelihood of a natural hazard event occurring and the likely extent of any damage to people, property or the
</td>
<td>
5.4.3.3 Restricted discretionary activities<br>
a. The activities listed below are restricted discretionary activities where the activity is located within the area shown on the Planning Maps as the Waimakariri Flood Management Area.<br>
b. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion as set out in the following table.
<table>
<tr><th colspan="2">Activity</th><th>The Council's discretion shall be limited to the following matters:</th></tr>
<tr><td>RD1</td><td>Filling and excavation within Henderson Basin for the creation and enhancement of:<br>i. water bodies, wetlands or public access ways associated with the recreation values of the water bodies or wetlands within the Basin; and<br>ii. stormwater treatment systems including water quality treatment, attenuation and compensatory storage.</td><td rowspan="3">a. The likely effects of proposed filling, or excavation or subdivision on the functioning of the ponding area or floodplain during flood periods including any compensatory storage proposed.<br>b. Any potential impacts of excavation or filling or subdivision on the rate, level or volume of flood discharges to the Avon, Heathcote and Styx Rivers and their tributary streams and margins.<br>c. Any adverse effects on the natural qualities, amenity values or ecology of water bodies and wetland areas.<br>d. In respect to the Lower Styx Ponding Area, any adverse effects likely on land as a result of tidal influences during flood periods including the potential for exacerbation of those effects with potential sea level rise.<br>e. Any adverse effects on access for maintenance or flood protection works.<br>f. The effectiveness and environmental impact of any measures that may be</td></tr>
<tr><td>RD2</td><td>Utilities that do not meet the activity specific standard in P11 of Rule 5.4.5.1.</td></tr>
<tr><td>RD3</td><td>Subdivision within the area shown at Appendix 8.10.7(d) – Cashmere/ Worsleys Development Plan Area for the following purposes:<br>a. Roads<br>b. 'Land to Vest' areas as shown at Appendix 8.10.7d. This allotment will be transferred to the Council.</td></tr>
</table>
</td>
<td></td>
<td></td>
<td></td>
<td>Only the Auckland and Christchurch plans require consideration of climate change and/or sea level rise as matters of discretion.</td>
</tr>
</table>

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
|---|---|---|---|---|---|---|

environment taking in to account the likely effects of climate change, including sea level rise;

(c) effects on landscape and other environmental values, associated earthworks and land form modifications;

(d) effects on public access; and

(e) the ability to relocate buildings or structures including the proposed duration of occupation of the building or structure within a hazard area, taking into account the long term likely effects of climate change.

*Infrastructure:*

*• on land which may be subject to coastal erosion;*

*• on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP);*

*• in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1 metre sea level rise (CSI1);*

*• in the 1 per cent annual exceedance probability (AEP) floodplain; • in overland flow paths and*

*• on land which may be subject to instability*

(18) Operation, maintenance, renewal, repair and minor infrastructure upgrading, of infrastructure in areas listed in the heading above that do not comply with Standard E36.6.1.13:

(a) the functional and/or operational need to locate within the hazard area;

(b) the risk of adverse effects to other people, property and the environment including all of the following:

(i) risk to public health and safety;

(ii) impacts on landscape values and public access associated with the proposed activity including a need for hard protection structures to be required to protect the utility from the natural hazard;

(iii) the management or regulation of other people and property required to mitigate natural hazard risks resulting from the location of the infrastructure;

(iv) the storage or use of hazardous substances in relation to the activity;

(v) any exacerbation of an existing natural hazard or creation of a new natural hazard as a result of the structure;

(vi) the use of non-structural solutions instead of hard engineering solutions; and

(vii) the ability to relocate or remove structures.

| | | |
|---|---|---|
| | | proposed to mitigate the effects of filling or excavation.<br>g. Any beneficial effects, including the provision of public access, or the enhancement of the natural qualities, amenity values or ecology of water bodies and wetland areas. |

**5.4.5.2 Restricted discretionary activities**

a. The activities listed below are restricted discretionary activities where the activity is located in the area shown on the Planning Maps as Flood Ponding Management Area.

b. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion as set out in the following table.

| Activity | | The Council's discretion shall be limited to the following matters: |
|---|---|---|
| RD1 | Filling and excavation within Henderson Basin for the creation and enhancement of:<br>i. water bodies, wetlands or public access ways associated with the recreation values of the water bodies or wetlands within the Basin; and<br>ii. Stormwater treatment systems including water quality treatment, attenuation and compensatory storage. | a. The likely effects of proposed filling, or excavation or subdivision on the functioning of the ponding area or floodplain during flood periods including any compensatory storage proposed.<br>b. Any potential impacts of excavation or filling or subdivision on the rate, level or volume of flood discharges to the Avon, Heathcote and Styx Rivers and their tributary streams and margins.<br>c. Any adverse effects on the natural qualities, amenity values or ecology of water bodies and wetland areas.<br>d. In respect to the Lower Styx Ponding Area, any adverse effects likely on land as a result of tidal influences during flood periods including |
| RD2 | Utilities that do not meet the activity specific standard in P11 of Rule 5.4.5.1. | |
| RD3 | Subdivision within the area shown at Appendix 8.10.7(d) – Cashmere/ | |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
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| | | Worsleys Development Plan Area for the following purposes:<br>a. Roads;<br>b. 'Land to Vest' areas as shown on Appendix 8.10.7d This allotment will be transferred to the Council. | the potential for exacerbation of those effects with potential sea level rise.<br>e. Any adverse effects on access for maintenance or flood protection works.<br>f. The effectiveness and environmental impact of any measures that may be proposed to mitigate the effects of filling or excavation.<br>g. Any beneficial effects, including the provision of public access, or the enhancement of the natural qualities, amenity values or ecology of water bodies and wetland areas. | | | | |
| | | **6.6.7 Rules Matters of discretion**<br>**6.6.7.1 Natural hazards**<br>All activities<br>a. Any adverse effects on surface drainage.<br>i. Earthworks, buildings, or other structures including fences, decks, posts and struts, located in water body setbacks shall not impede the capability of waterway channels or ponding areas to store or convey surface water.<br>ii. Adverse effects shall not be displaced to adjacent properties.<br>b. The cumulative effect of developments adjacent to the water body on land drainage or flood risk.<br>c. Any adverse effects likely as a result of tidal influences during flood periods including the potential for exacerbation of effects with sea level rise.<br>d. The likely effects on the natural functioning of the water body, including any likelihood of work undertaken exacerbating inundation, erosion, alluvion or avulsion whether upstream or downstream of the site.<br>e. Any beneficial effects of the proposal for the function of the water body such as decreased likelihood of blockage or improved surface drainage where these effects remain consistent with protecting the ecological health of the water body.<br>f. Any functional necessity for the activity to locate within the water body setback. | | | | |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
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| | | Additional for buildings, other structures and impervious surfaces<br>g. The risk of damage to buildings and property posed by natural hazards including flooding, liquefaction (including lateral spread) and slumping and the scale and likelihood of that potential damage.<br>*Additional within a Flood Management Area*<br>h. Matters of discretion that apply to buildings and/or filling and excavation in a Flood Management Area (Rules 5.4.1.5, 5.4.2.4 and 5.4.3.3, as relevant to the Flood Management Area). | | | | |
| | **E38 Subdivision – Urban**<br>**E38.12.1. Matters of discretion**<br>(2) subdivision of a site subject to coastal storm inundation one per cent annual exceedance probability or coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise:<br>(a) the effects of the hazard on the intended use of the sites created by the subdivision and the vulnerability of these uses to coastal storm inundation events.<br>(2) subdivision of a site subject to coastal storm inundation one per cent annual exceedance probability or coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise:<br>(a) the effects of the hazard on the intended use of the sites created by the subdivision and the vulnerability of these uses to coastal storm inundation events:<br>(i) whether the location and design of development including proposed and existing building platforms and access ways include the ability to relocate uses within the proposed site area, taking into account in urban and serviced areas a 1 metre rise in sea levels;<br>(ii) whether the use of defences to protect the land and any buildings or structures on the land from coastal storm inundation are necessary;<br>(iii) whether there is any residual risk posed by coastal storm inundation to the site(s) associated with any existing or proposed coastal defences;<br>(iv) whether there are effects on landscape values resulting from associated built and/or land form modifications required to provide for the intended use of the site; and<br>(v) refer to Policy E38.3(2). | **13.9.6 Rules Matters of discretion**<br>**Clearwater**<br>**Golf Resort and Whisper Creek Golf Resort**<br>When considering applications for restricted discretionary activities, the Council's discretion to grant or decline consent, or impose conditions, is restricted to the matters over which discretion is restricted in the tables in Rules 13.9.4.1.3 and 13.9.5.1.3, and as set out for that matter below.<br>**13.9.6.8 Construction of the Golf Course Whisper Creek Golf Resort only**<br>a. The provisions of a management plan to address the following:<br>i. The biodiversity and enhancement of waterways and wetland areas, as well as measures to mitigate any adverse effects on biodiversity.<br>ii. Details of design, construction and operation of the golf course drainage system and wetlands, including proposed excavation and filling, and potential effects on sediment discharges and water quality.<br>iii. Storage capacity in the Lower Styx Ponding Area and effective management of stormwater and flood discharges in the Zone, with consideration of tidal influences and the effects of sea level rise.<br>iv. Amenity planting around the Zone boundary and its ability to screen and soften built development.<br>v. Appropriate management of any archaeological sites. | | | | |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
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| | **E39 Subdivision – Rural**<br>**E39.8.1. Matters of discretion**<br>(2) subdivision of a site subject to coastal storm inundation one per cent annual exceedance probability or coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise:<br>(a) the effects of the hazards on the intended use of the sites created by the subdivision and the vulnerability of these uses to coastal storm inundation events. | | | | | |
| **Assessment criteria** | **E36.8.2. Assessment criteria**<br>*Activities on land which may be subject to coastal erosion*<br>(1) for external alterations to existing buildings which increase the gross floor area of the building on land which may be subject to coastal erosion; for all other buildings and structures on land which may be subject to coastal<br>erosion; and for on-site septic tanks, wastewater treatment and disposal systems, effluent disposal fields, underground storage tanks, water tanks or stormwater pipes or soakage fields on land which may be subject to coastal erosion:<br>(a) the likelihood of a coastal hazard event occurring, its magnitude and duration, the consequences of the event and its effects on public health, safety, property and the environment;<br>(b) the extent to which site specific analysis, such as engineering, stability or flooding reports and its analysis have been undertaken and any other information the Council may have on the site and surrounding land;<br>(c) the extent to which landscape and other environmental values are affected by any works proposed in association with the building or structure or mitigation of the hazard; and<br>(d) the extent to which any building or structure can be relocated in the event of severe coastal erosion or shoreline retreat, taking into account the likely long term effects of climate change.<br>*Activities on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP)*<br>(2) for external alternations to existing buildings which increase the gross floor area of the building on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP); for all other<br>buildings and structures on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP); for on-site | | | | | Only the Auckland plan contains assessment criteria which contain specific reference to climate change/sea level rise. |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
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| | septic tanks, wastewater treatment and disposal systems, effluent disposal fields,<br>underground storage tanks, water tanks or stormwater pipes or soakage fields on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP):<br>(a) the likelihood of a coastal storm inundation hazard event occurring, its magnitude and duration, the consequences of the event and its effects on public health, safety, property and the environment;<br>(b) the extent to which site-specific analysis, such as engineering, stability or flooding reports and its analysis have been undertaken and any other information the Council may have on the site and surrounding land;<br>(c) the extent to which landscape and other environmental values are affected by any works proposed in association with the building or structure or mitigation of the hazard; and<br>(d) the extent to which any building or structure can be relocated in the event of severe coastal erosion or shoreline retreat, taking into account the likely long term effects of climate change.<br>(17) for operation, maintenance, renewal, repair and minor infrastructure upgrading of infrastructure on land which may be subject to coastal erosion; or on land which may be subject to coastal storm inundation 1 per cent annual exceedance probability (AEP); or in areas subject to coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise (CSI1); or in the 1 per cent annual exceedance probability (AEP) floodplain; or in overland flow paths; or on land which may be subject to land instability:<br>(a) the long-term management, maintenance and monitoring of any mechanisms associated with managing the risk of adverse effects resulting from the placement of infrastructure within a hazard area to other people, property and the environment including the management of hazardous substances;<br>(b) the extent to which residual risks to people, property and the environment resulting from any mitigation measures implemented to manage the hazard;<br>(c) the extent to which an existing hazard is exacerbated or a new hazard is created as a result of the structure;<br>(d) the extent to which the proposal includes non-structural solutions to protect infrastructure from the hazard and resulting adverse effects; and<br>(e) the extent to which landscape values and/ or public access are affected by the proposed structure or structures | | | | | |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
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| | associated with the mitigation of the hazard.<br><br>**E39.8.2. Assessment criteria**<br>(2) subdivision of a site subject to coastal storm inundation one per cent annual exceedance probability and coastal storm inundation one per cent annual exceedance probability plus 1 metre sea level rise:<br>(a) the effects of the hazards on the intended use of the sites created by the subdivision and the vulnerability of these uses to coastal storm inundation events:<br>(i) whether the location and design of development including proposed and existing building platforms and access ways include the ability to relocate uses within the proposed site area;<br>(ii) whether the use of defences to protect the land and any buildings or structures on the land from coastal storm inundation are necessary;<br>(iii) whether there is any residual risk posed by coastal storm inundation to the site(s) associated with any existing or proposed coastal defences;<br>(iv) whether there are effects on landscape values resulting from associated built and/or land form modifications required to provide for the intended use of the site; and<br>(v) Policy E39.3(2) | | | | | |
| **Information Requirements** | **E36 Natural Hazards**<br>**E36.9. Special information requirements**<br>(1) A hazard risk assessment must be undertaken when subdivision, use or development requiring resource consent is proposed to be undertaken on land which may be subject to any one or more of the following:<br>(a) coastal erosion;<br>(b) coastal storm inundation 1 per cent annual exceedance probability (AEP);<br>(c) coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1m sea level rise;<br>(d) coastal hazards;<br>(e) the 1 per cent annual exceedance probability (AEP) floodplain;<br>(f) overland flow paths; or<br>(g) land instability.<br>The level of information required to be provided should be proportionate to the hazard risk, the nature of the hazard. It should also be appropriate to the scale, nature and location of the development and reflective of the scale of the activity proposed. For coastal hazards this should include a consideration of the effects of | | **Appendix 1.2 Information Requirements**<br>**Table 1.2.2.6b: Information requirements for Full ICMPs and Sub-catchment ICMPs for Greenfield Areas**<br>a) Maps/drawings identifying for the relevant hydrological catchment (or sub-catchment):<br>i. the catchment boundary; (Note: In the case of a full ICMP, this will be used in relation to determining future compliance with Rule 25.13.4.1(b));<br>ii. Natural features, surface water bodies, existing drainage systems and infrastructure;<br>iii. Existing development and land uses (see f) vi below);<br>iv. Proposed future development and land uses (see d) below); and<br>v. The extent of the infrastructure networks that have been assessed and the location of any network constraints (see f) vii below).<br>b) Classification of the surface water bodies within the catchment (or sub-catchment) as detailed in the Waikato Regional Plan.<br>c) The social, economic, ecological, amenity and cultural objectives being | | | The Auckland plan requires, for activities undertaken within land subject to certain hazard areas, a hazard risk assessment to be undertaken. Consideration of climate change is a requirement.<br>It should be noted that the mapping referred to in the rules/information requirements is not part of the plan. It is available on the Auckland Council website through the GeoMaps GIS viewer.<br>The effects of climate change is also a matter that needs to be taken into account when preparing an Integrated Catchment Management Plan under the Hamilton plan. |

| Provision | Auckland Unitary Plan (Partly Operative) | Christchurch District Plan | Hamilton District Plan (Operative in Part) | Proposed Hurunui District Plan (as amended by decisions 2016) | Ashburton District Plan | Comment |
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| | climate change over at least a 100 year timeframe.<br>(2) A hazard risk assessment report must accompany a resource consent application for the subdivision, use or development referenced in E36.9(1) above and must identify whether the land is or is likely to be subject to<br>coastal erosion; coastal storm inundation 1 per cent annual exceedance probability (AEP); coastal storm inundation 1 per cent annual exceedance probability (AEP) plus 1 metre seal level rise; coastal hazards; the 1 per cent annual exceedance probability (AEP) floodplain; overland flow paths; or land instability, over at least the next 100 years and, if found to be subject to one or more of these hazards, should provide an assessment, which does not need to duplicate an assessment of environmental effects, which addresses all of the following:<br>(a) the type, frequency and scale of the natural hazard and whether adverse effects on the development will be temporary or permanent;<br>(b) the type of activity being undertaken and its vulnerability to natural hazard events;<br>(c) the consequences of a natural hazard event in relation to the proposed activity and the people likely to be involved in that activity;<br>(d) the potential effects on public safety and other property;<br>(e) any exacerbation of an existing natural hazard risks or creation of a new natural hazard risks;<br>(f) whether any building, structure or activity located on land subject to natural hazards near the coast can be relocated in the event of severe coastal erosion, coastal storm inundation or shoreline retreat;<br>(g) the ability to use of non-structural solutions, such as planting or the retention or enhancement of natural landform buffers to avoid, remedy or mitigate the hazard, rather than hard engineering solutions or protection structures;<br>(h) the design and construction of buildings and structures to mitigate the effects of natural hazards;<br>(i) the effect of structures used to mitigate hazards on landscape values and public access;<br>(j) site layout and management to avoid or mitigate the adverse effects of natural hazards, including access and exit during a natural hazard event;<br>(k) the duration of consent and how this may limit the exposure for more or less vulnerable activities to the effects of | | sought for the catchment (likely to stem from a structure planning process).<br>d) A description of proposed urban growth, development and land use intensification within the catchment (or sub-catchment).<br>e) A list of the key stakeholders associated with the catchment (or sub-catchment), details of the consultation undertaken, and details of their respective views on providing for new stormwater diversion and discharge activities with the catchment (or sub-catchment).<br>f) An assessment of the current state of the catchment (or sub-catchment) and stormwater receiving environment/s, and the provision of catchment baseline information (including maps/drawings) on:<br>i. Topography;<br>ii. Soils and geology;<br>iii. Receiving environment –<br>a. Erosion;<br>b. Ecology, including ecological sensitivity;<br>c. Water quality (including contaminant load);<br>d. Sediment quality; and<br>e. Hydrology;<br>iv. Hydrogeology;<br>v. Flooding (including overland flow paths);<br>vi. Existing development and land uses;<br>vii. Existing three waters infrastructure and water source(s), including their capacity to appropriately service the proposed urban growth, development and landuse intensification within the catchment (or sub-catchment); and<br>viii. All relevant existing resource use authorisations (including, for example, consents issued by the Waikato Regional Council for<br>g) The effects of climate change.<br>h) An assessment of the environmental effects, including cumulative effects over time, of all proposed water take, wastewater management and stormwater diversion and discharge activities on the catchment (or sub-catchment) and stormwater receiving environment/s. The assessment shall include maps/drawings and be in such detail as corresponds with the scale and significance of the effects on the catchment (or sub-catchment) including, but not limited to, effects on the following, taking into account the effects of climate change:<br>i. Natural features, surface water bodies and aquifers, including water sources; | | | |

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| | natural hazards including the effects of climate change; and<br>(l) any measures and/ or plans proposed to mitigate the natural hazard or the effects of the natural hazard. | | ii. Sites of cultural and/or historical significance;<br>iii. Public health;<br>iv. Flooding hazards, including overland flow;<br>v. Receiving water hydrology, including base flows and peak flows in rivers and streams and long-term aquifer levels;<br>vi. Receiving water sediment and water quality;<br>vii. Receiving water habitat, ecology and ecosystem health, including an explanation of how they will be maintained and enhanced;<br>viii. Receiving water riparian vegetation;<br>ix. The extent and quality of open stream channels, including erosion and sedimentation;<br>x. Fish passage for indigenous and trout fisheries (refer to the Waikato Regional Plan Water Management Classes for applicability);<br>xi. The natural and amenity values of stormwater receiving waters, including the management of litter than becomes entrained in stormwater;<br>xii. Existing infrastructure; and<br>xiii. Existing authorised resource use activities. | | | |
| **Definitions** | **Coastal storm inundation area one per cent AEP plus 1m sea level rise (CSI1)**<br>The area inundated during a coastal-storm inundation one per cent event plus an additional one metre of sea-level rise relative to the present-day mean sea level The area of coastal storm inundation one per cent plus 1m sea level rise (CSI1) is defined as:<br>• the area shown in the planning maps; or<br>• in a report prepared by a suitably qualified professional for specific site. | | | | | Only the Auckland plan contains definitions with specific reference to climate change/sea level rise. |
| | **Floodplain**<br>The area of land that is inundated by runoff from a specified rainfall event, with an upstream catchment generating 2m3/s or greater of above ground flow, taking into account:<br>• any increases in impervious areas that would arise from changes in land use enabled by the policies and zonings of the Plan;<br>• the effects of climate change over a 100 year timeframe in respect of the frequency and duration of rain fall events and a 1m sea level rise; and<br>• assuming that primary drainage is not blocked.<br>Excludes the following areas:<br>• constructed depressions or pits within the Special Purpose - Quarry Zone | | | | | |

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| | Note: The Council holds publicly available information showing the modelled extent of floodplains affecting specific properties in its GIS viewer for the one per cent annual exceedance probability (AEP) rainfall event (the floodplain maps). The floodplain map is indicative only although Council accepts its accuracy with regard to land shown on the floodplain map as being outside the floodplain. A party may provide the Council with a site specific technical report prepared by a suitably qualified and experienced person to establish the extent, depth and flow characteristics of the floodplain.<br>When taking account of impervious areas that would arise from changes in land use enabled by the policies and zonings of the Plan, recognition should be given to any existing or planned flood attenuation works either exiting or planned in an integrated catchment management plan.<br>Council will continually update the floodplain map to reflect the best information available. | | | | | |

# 3 Mahaanui Iwi Management Plan

## 3.1 Overview

The Mahaanui Iwi Management Plan, February 2013 (the IMP), is a manawhenua planning document which sets out a policy framework for the protection and enhancement of Ngāi Tahu values, and for achieving outcomes that provide for the relationship of Ngāi Tahu with natural resources. The IMP reflects the collective efforts of the following six Papatipu Rūnanga (marae based councils):

- Ngāi Tūāhuriri Rūnanga
- Te Hapū o Ngāti Wheke (Rāpaki)
- Te Rūnanga o Koukourārata
- Ōnuku Rūnanga
- Wairewa Rūnanga
- Te Taumutu Rūnanga

These Papatipu Rūnanga represent the hapū (sub-tribes) who hold manawhenua rights over lands and waters within the takiwā (region, tribal or hapū traditional territory) from the Hurunui River to the Hakatere River and inland to Kā Tiritiri o Te Moana (as shown on Map 1 within the IMP) to which the IMP applies.[6]

Section 1.2 of the IMP (Te Take O Te Mahere/Purpose of the plan) states the following:

'While the plan is first and foremost a planning document to assist Papatipu Rūnanga to participate effectively in natural resource and environmental management in the takiwā, a fundamental objective of the plan is to enable external agencies to understand issues of significance to tāngata whenua, and how those issues can be resolved in a manner consistent with cultural values and interests. The plan provides a tool for local authorities, other agencies and the wider community to:

- Understand what is important to tāngata whenua and why;
- Meet statutory obligations under the NTCSA 1998, RMA1991 and other legislation, including recognising and providing for the relationship of Ngāi Tahu to ancestral land, water, wāhi tapu and wāhi taonga as a matter of national importance;
- Determine the nature and extent of consultation that may be required regarding particular activities or places of importance; and
- Afford appropriate weight to Ngāi Tahu values in decision making processes.'

[6] The whole of the Selwyn District is contained within the takiwā applicable to the IMP

## 3.2 Review

A review of the IMP has been undertaken to identify provisions relating to climate change, including any climate change related implementation methods relating to local authorities and their planning responsibilities. Table 3.1 below contains the relevant provisions from the IMP relating to climate change, along with comment as to whether any of these provisions could be directly dealt with as part of SDC's District Plan review.

**Table 3-1 IMP Review**

| Provision Reference | Comment |
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| **Wāhi Tuarima – Part 5**<br>**Ngā take ā-rohe me ngā kaupapa – Regional issues and policy**<br>**5.2 Ranginui**<br>**Issue R3: Climate change**<br>Climate change could have significant impacts on the relationship of tāngata whenua to ancestral lands, waters and sites of significance. | Part 5 of the IMP outlines regional objectives, issues and policies which apply to the whole of the takiwā covered by the IMP except where replaced by a locally specific policy in the catchment sections (Part 6).<br>Part 5.2 is a policy section relating to Ranginui (sky).<br>The policies listed below are the responses to Issue R3. |
| **Ngā Kaupapa / Policy**<br>R3.1 To work with Te Rūnanga o Ngāi Tahu to contribute the local views of Papatipu Rūnanga to regional and national climate change policies and processes. | These policies reflect the aspirations of Ngāi Tahu to develop tribal policy and contribute to regional and national climate change policies and processes.<br>As such these policies are not considered to be directly relevant to SDC's District Plan review. |
| R3.2 To support and contribute to the development of tribal policy concerning climate change. | |
| R3.3 To require that local authorities recognise and provide for the potential effects of climate change on resources and values of importance to Ngāi Tahu, for example:<br>(a) Effects of sea level rise on coastal marae and coastal wāhi tapu, including urupā;<br>(b) Increased salination of rivers and hāpua, affecting mahinga kai resources and customary use;<br>(c) Warming of oceans and effects on marine ecosystems, including those on the sea floor;<br>(d) Changes to the amount of rainfall, and effects on aquifer recharge;<br>(e) Lake management regimes, including the opening of Te Waihora and Te Roto o Wairewa to the sea; and<br>(f) Changes to the habitats of indigenous flora and fauna, including taonga species. | This policy, which requires that local authorities recognise and provide for the potential effects of climate change on resources and values of importance to Ngāi Tahu, is considered to be of relevance to SDC's District Plan review.<br>In relation to the identified resources and values of importance to Ngāi Tahu within Policy R3.3, we specifically note the following in terms of potential responses:<br>(a) It is anticipated SDC will work together with Ngāi Tahu to identify within the District Plan wāhi tapu sites of importance such as coastal marae and urupā. In responding to the effects of sea level rise, this matter could be dealt with through District Plan provisions relating to the protection of existing identified sites.<br>(b) The increased salination of rivers and coastal lagoons is not considered to be a matter directly dealt with through a District |

| Provision Reference | Comment |
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| | Plan. Nonetheless, District Plans can however, through policies and rules relating to esplanade reserves for example, recognise and provide for ongoing access to riparian and coastal areas which may assist in Ngāi Tahu in exercising their customary uses.<br>(c) The warming of oceans and effects on marine ecosystems is not considered to be a matter directly dealt with through a District Plan, with the coastal marine area managed under the provisions of Regional Plans.<br>(d) It is considered the District Plan can assist in the recharge of aquifers through policies and rules which seek to minimise impervious surfaces levels in developments. In addition, the provisions of a District Plan can encourage low impact design stormwater management measures which increase infiltration.<br>(e) Lake management regimes are not considered to be matters directly dealt with through a District Plan, as the control of the quantity, level and flow of water in lakes is managed by the Regional Council.<br>(f) The District Plan can assist in the protection of habitats of indigenous flora and fauna through policies and rules around identified significant natural areas and/or scheduled trees for example. In addition, SDC could work together with Ngāi Tahu to identify within the District Plan any specific habitats of significance to taonga species. |
| R3.4 To support the reduction of emissions as a response to climate change, including but not limited to:<br>(a) Urban planning to reduce transport emissions;<br>(b) Use of solar water heating and similar measures to reduce energy use; and<br>(c) Improved farming practices to reduce emissions. | In our view, the cause of climate change effects is a global issue which consequently requires policy responses at a global level. As such, it is difficult for a District Plan to provide a policy response that looks to reduce the effects that cause climate change in a manner that is meaningful and supported by an appropriately robust evidence base.<br>As outlined in Table 2-1, the Hurunui and Ashburton plans made specific references to climate change within their issues statements, alluding to climate change being a matter which needs to be reduced/stopped. There were however no subsequent methods to resolve this issue.<br>In addition, we note the Auckland Unitary Plan Independent Hearings Panel removed a number of climate change related objectives and policies given the inability for the plan to implement them. |

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| | A District Plan can include provisions which can assist in the reduction of transport emissions and energy, for example:<br>- Encourage and provide for emission-free transport modes (walking and cycling);<br>- Encourage infill development (reducing urban sprawl and associated travel distances) and/or new development around existing transport networks; and<br>- Encourage small and community-scale renewable electricity generation, like solar panels.<br>Notwithstanding the benefits these provisions could have, it is considered drawing a direct and quantifiable correlation between District Plan provisions and reducing emissions is potentially very problematic; particularly when considering the requirement to assess the efficiency and effectiveness of the provisions under Section 32 of the RMA.<br>On this basis, it is recommended that SDC's focus for the District Plan review in terms of climate change is to ensure the provisions appropriately respond to the effects of climate change; rather than attempt to try and stop/reduce this issue. |
| R3.5 Climate change legislation associated with forests and carbon credits should promote, encourage and reward the protection and restoration of indigenous forest.<br>R3.6 Restoration planning for wetlands and lagoons must take into account the potential for future sea level rise associated with climate change. | While climate change legislation associated with forests (and in particular carbon credits) is more central government focussed and wetland/lagoon restoration is generally a regional council matter; these policies nonetheless identify to SDC that the protection and restoration of indigenous forest, wetlands and lagoons are of importance.<br>We also refer to our comment above that the District Plan can assist in the protection of identified significant natural areas like wetlands through policies and rules. |
| *He Kupu Whakamāhukihuki / Explanation*<br>Climate change has the potential to have significant effects on sites and resources of cultural importance, particularly in coastal regions where many wāhi tapu and marae are located. Coastal erosion, sea level rise and changes to the productively of inshore fisheries are all potential effects of climate change that will have a direct and significant impact on tāngata whenua. Less rainfall and drier patterns of weather would result in changes to the depth and flow of the region's rivers and therefore the ability of tāngata whenua to access mahinga kai. Climate change is | Further to the actions sought within the above policies, this explanation highlights the importance to Ngāi Tahu of being meaningfully involved in the development of climate change policy.<br>It is therefore recommended that representatives of Ngāi Tahu are involved in the development of any climate change related provisions as part of SDC's District Plan review. |

| Provision Reference | Comment |
|---|---|
| also an important consideration for Ngāi Tahu efforts to restore degraded lake environments, such as Te Roto o Wairewa and Te Waihora.<br>At a local level, it is critical that the particular effects of climate change on tāngata whenua are recognised and that Ngāi Tahu are meaningfully involved in the development of climate change policy. This is particularly important with regard to the identification of measures to offset or mitigate the impacts of climate change. For example, climate change policy on afforestation and carbon credits can provide opportunities to protect and restore indigenous forests on the landscape. | |
| **Wāhi Tuaono – Part 6**<br>**Ngā take ā-hikuwai me ngā kaupapa – Catchments**<br>**6.10 Te Roto o Wairewa**<br>**Issue W8: Climate Change**<br>Climate change is an important consideration for the management of Te Roto o Wairewa | Part 6 of the IMP is divided into 12 catchment or distinctive geographical area sections.<br>The policies in Section 6.10 (Te Roto o Wairewa), which sit alongside the regional policies in Part 5, address issues of particular significance in the catchment of Te Roto o Wairewa. This catchment is centered on the lake, and includes Western and Ōkuti Valleys and the eastern end of Kaitōrete Spit (as shown on Map 22 within the IMP).<br>It is noted that the Te Roto o Wairewa catchment on Banks Peninsula is not located within the jurisdiction of SDC and as such is not of direct relevance. However these provisions have been included as part of this review for completeness. |
| **Ngā Kaupapa / Policy**<br>W8.1 To require that potential changes to Te Roto o Wairewa and adjacent lands as a result of climate change induced sea level rise are recognised and provided for in all planning and consenting activities in the catchment. | |
| *He Kupu Whakamāhukihuki / Explanation*<br>Climate change is an important consideration with regard to achieving Ngāi Tahu objectives and aspirations for the Te Roto o Wairewa catchment. Specific issues include:<br>(a) Potential changes to the depth and flow of waterways in the catchment, as a result of less rainfall. This will affect the cultural health of the waterways and therefore Te Roto o Wairewa;<br>(b) Sea level rise would pose a threat to Mata Hāpuku/ the community of Birdlings Flat;<br>(c) Sea level rise could result in increased erosion and exposure of significant sites on Kaitōrete Spit and the lake edge; and<br>(d) Climate change induced changes to waterways and coastal areas could result in a loss of mahinga kai resources, sites and opportunities. | |

# 4 Conclusions

Based on the findings of the review undertake in Section 3 of this report, it is apparent based on the five examples reviewed that the approach to addressing climate change within district plans is significantly varied. For example, the Proposed Hurunui District Plan and the Ashburton District Plan have issue statements which make specific reference to climate change, but as matters which need to reduced or stopped as opposed to managed through the provisions of the plan.

The Auckland Unitary Plan (Partly Operative) and Christchurch District Plan both have quite extensive suites of provisions including policies, rules and matters of discretion which require the consideration of climate change/sea level rise. The Auckland plan also goes further by including associated assessment criteria, information requirements and definitions which have reference to climate change/sea level rise. This includes the requirement for a hazard risk assessment to be undertaken for activities proposed within land subject to certain hazard areas.

By comparison, the three other district plan examples reviewed are limited in term of their references to climate change.

We note that all the plans reviewed (except Ashburton) contain policies with references to climate change and/or sea level rise, with natural hazards being the topic where each of these four plans have relevant policies within their respective chapters.

While the Hamilton, Hurunui and Ashburton District Plans all also have various flood hazard information on their planning maps, the Christchurch District Plan appears to be the only example where flood hazard risk areas, shown in the district plan maps, appear to relate to a modelled event that takes into account climate change. The mapping referred to in the relevant climate change rules/information requirements of the Auckland Unitary Plan is not part of the plan, but is instead available separately on the Auckland Council website through the GeoMaps GIS viewer.

Three differing climate change-related metrics are contained within the five district plan examples, being:

- Sea level rise of 1m;
- 1 metre of sea level rise and an increase in rainfall intensity by 16% through to 2115 as a result of climate change; and
- Mean sea-level rise of at least 0.8m relative to the 1980-1999 average.

Further investigation would be required to establish the rationale behind the mapping undertaken by these Councils (i.e. what extent of flooding is caused simply by the risk of the natural hazard and how much is considered to be exacerbated by climate change) and why these various metrics have been applied.

In addition to the above, the review of the Mahaanui Iwi Management Plan contained in Section 4 of this report has identified that climate change is an important issue that could have significant impacts on the relationship of Ngāi Tahu and their culture and traditions with their ancestral land, water, sites, wāhi tapu and other taonga.

As such the IMP outlines a range of policies, with those of the most likely relevance to be the requirement that local authorities recognise and provide for the potential effects of climate change on resources and values of importance to Ngāi Tahu, and supporting the reduction of emissions as a response to climate change.

# 5 Recommendations

The Auckland Unitary Plan and Christchurch District Plan have been identified specifically from the five examples reviewed as being the most comprehensive in terms of plan provisions that address the effects of climate change and sea level rise.

On this basis, to gain a better understanding of how the identified provisions work and what particular provisions may be applicable to SDC, it is recommended that a further review of the relevant Section 32 and 42A reports for Auckland and Christchurch's plans is undertaken to establish:

- The justification for including, or not, provisions relating to the effects of climate change;
- Any evidential basis relied on for the inclusion of the provisions;
- Any cost benefit analysis associated with the provisions;
- Whether the provisions were significantly amended through the plan review process; and
- How this has then resulted in what is in the plan(s).

In addition, the IMP also contains a number of policies relating climate change and sea level rise which are considered to be of direct relevance to SDC's District Plan review.

Given the findings of the review of the IMP, it is recommended that Ngāi Tahu representatives which contributed to the IMP are involved in the development of any climate change related provisions as part of SDC's District Plan review.