#### BEFORE THE HEARINGS PANEL FOR THE PROPOSED TIMARU DISTRICT PLAN

UNDER	the Resource Management Act 1991 (RMA)
AND	
IN THE MATTER	of the Proposed Timaru District Plan
AND	
IN THE MATTER	of Hearing F: Hazards and Risks (Natural Hazards only) and Other District-wide Matters

#### STATEMENT OF EVIDENCE OF DEIDRE FRANCIS ON BEHALF OF THE CANTERBURY REGIONAL COUNCIL

Hearing F: Hazards and Risks (Natural Hazards only) and Other District-wide Matters

9 April 2025

#### SUMMARY STATEMENT

- 1 The Canterbury Regional Council (**Regional Council**) submission sought amendments to the notified Proposed Timaru District Plan (**pTDP**) provisions subject to this hearing stream. Most of these amendments concerned the natural hazards provisions where the Regional Council wanted better alignment with the Canterbury Regional Policy Statement (**CRPS**) and a more consistent approach across the Region.
- 2 The Regional Council also made submissions on the following chapters that are subject to this hearing stream: Drinking Water Protection, Activities on the Surface of Water, Coastal Environment, Noise, Versatile Soils, Public Access, Earthworks. In addition, some general submissions made by the Regional Council are being considered in this hearing stream.
- I have reviewed the Section 42A (s42A) reports prepared by Mr Willis,
   Mr Maclennan, Ms White and Ms Wilcox.
- 4 My evidence focuses on the recommendations of the relevant s42A officer to ensure that the pTDP gives effect to the CRPS.
- 5 My evidence mostly concerns the Regional Council submissions on the natural hazards chapter, but I also discuss submissions on the drinking water protection areas and the activities on the surface of water chapters.
- The Regional Council submission requested amendment to the planning maps to encompass a wider area potentially subject to flooding.
   Mr Griffiths, Team Leader Natural Hazards Science, has produced revised mapping and has included information in his evidence to support the adoption of this mapping.
- Further amendments to the pTDP have been proposed in my evidence and in the evidence of Mr Griffiths and Ms Irvine, Team Leader, Rivers Planning. These amendments are included as **Appendix 1** to my evidence.

#### INTRODUCTION

- 8 My full name is Deidre Francis. I am a Principal Planner at the Regional Council, a position I have held since August 2022.
- I hold a master's degree with distinction in Regional and Resource
   Planning from the University of Otago (1995) (MRRP). I have over 20
   years' experience in resource management planning.
- 10 My relevant experience includes drafting plan provisions, preparing s32A reports, preparing s42A reports and decisions reports for council Plan hearings, preparing submissions and presenting at hearings on proposed district plans. I led the development of the first Southland Regional Coastal Plan and the first Southland Regional Water Plan.
- Prior to joining the Regional Council, I worked as a Senior Management Planner for the Department of Conservation based in the Christchurch office, working on the development of the Rangitahi/Molesworth Recreation Reserve Management Plan and leading the rewrite of the draft Aoraki Mount Cook National Park Management Plan. Prior to that I worked for 14 years at the Southland Regional Council, starting as a graduate planner and finishing as Senior Planner. I also worked for the Planning Consultancy Ernest New and Associates in Invercargill, part time, while completing my MRRP.
- 12 I have prepared this planning evidence on behalf of the Regional Council.

#### CODE OF CONDUCT

- 13 Whilst I acknowledge that this is not an Environment Court hearing, I confirm that I have read and am familiar with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving any oral evidence during this hearing. Except where I state that I am relying on the evidence of another person, my evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
- 14 Although I am employed by the Regional Council, I am conscious that in giving evidence in an expert capacity that my overriding duty is to the

Hearing Panel as an independent planning expert. The recommendations made in this evidence are my own, based on my expertise.

#### SCOPE OF EVIDENCE

- 15 I have been asked by the Regional Council to provide planning evidence in relation to the Natural Hazards, Drinking Water Protection, Activities on the Surface of Water, Coastal Environment, Noise, Versatile Soils, Public Access, and Earthworks chapters of the pTDP. While the Regional Council submission addressed plan provisions in each of these chapters, the s42A officers have recommended accepting or accepting in part, most of those submissions. As outlined in **Appendix 2**, I support most of those recommendations. This evidence addresses recommendations where further changes are requested, or where further clarification may be helpful to the panel.
- 16 My evidence addresses:
  - a. the Regional Council's interest in the pTDP and the chapters where I have provided further evidence;
  - b. reference to the relevant statutory framework, where this supports understanding of the issues raised in this evidence; and
  - c. recommendations in the s42A reports.
- 17 In preparing my evidence, I have reviewed the following documents and evidence:
  - The relevant section 32 reports prepared and notified by Timaru
     District Council (**TDC**);
  - b. The notified provisions of the relevant chapters of the pTDP;
  - c. The s42A reports;
  - d. The CRPS;
  - e. The Regional Council submission on the pTDP;
  - f. The submissions of other submitters as they relate to the Regional Council's submission;

- g. The evidence and memo of Mr Nick Griffiths on behalf of the Regional Council; and
- h. The evidence of Ms Jolene Irvine on behalf of the Regional Council.
- 18 The majority of the Regional Council's submission points are focused on the Natural Hazards (NH) chapter of the pTDP or on provisions elsewhere in the pTDP that are relevant to natural hazards management. For that reason, I address the s42A report on NH and Coastal Environment (CE) first, followed by Drinking Water Protection Areas (DWPAs) and Activities on the Surface of Water (ASW).
- 19 Any further amendments sought are collated in Appendix 1. My responses to the s42A recommendations are set out in Appendix 2.

### REGIONAL COUNCIL'S INTEREST IN THE NATURAL HAZARD CHAPTER OF THE pTDP

- 20 The Regional Council has a responsibility for the control of the use of land for the purpose of avoiding or mitigating natural hazards under s30 of the Resource Management Act 1991 (**RMA**). This includes setting out, within the CRPS, the responsibilities of local authorities for managing natural hazards. The main focus of the Regional Council's submission was to support TDC in implementing and giving effect to the CRPS and to ensure that the proposed provisions are consistent with the regional planning framework.
- 21 The Regional Council also undertakes a significant role in providing technical information to territorial authorities on a range of natural hazards to assist with the development of district plans, plan changes and district development strategies.
- 22 The Regional Council made submissions supporting some provisions in the Natural Hazards Chapter, seeking that those provisions be retained as notified or the original intent be preserved. However, the majority of the Regional Council's submissions requested amendments to improve clarity and/or consistency in giving effect to and implementing the CRPS.

#### STATUTORY FRAMEWORK

23 The relevant statutory framework for the Natural Hazards chapter has been laid out in the Natural Hazards s32 Report. Rather than repeating all of the relevant legislation here, I have listed the sections of legislation and policies that are most relevant to the points made in my evidence. These are as follows:

#### **CRPS Chapter 11**

- 24 The policy framework in the CRPS for managing Natural Hazards is mostly contained within Chapter 11. This chapter sets out a risk-based approach for managing natural hazards in Canterbury. Risk is determined as a function of the likelihood and the consequences of a natural hazard occurring.
- 25 The CRPS applies a three-tiered management hierarchy to implement this approach<sup>1</sup>. It requires the avoidance of development in high risk or hazard prone areas as the first priority, it requires mitigation where avoidance is not possible or where residual mitigated risk from the natural hazard will be acceptable and thirdly it provides for recovery from and response to – the consequences of natural hazard events. The relevant objectives and policies that implement this hierarchy are provided in full in Appendix 4.
- 26 The CRPS requires the Regional Council to provide information it holds to define high hazard areas; to share any information it holds about natural hazards when requested, and to work with Territorial Authorities (TAs) to investigate and define potential high hazard areas where information is uncertain or insufficient. The Regional Council is also required to assist TAs in determining areas subject to 0.5% AEP flood events, by providing the information it holds, and guidance about appropriate floor levels to manage the adverse effects of flood events.

#### **RESPONSE TO THE S42A REPORT – NATURAL HAZARDS**

27 The Regional Council made submissions requesting amendments to provisions in the pTDP. I generally support Mr Willis' recommendations in the s42A report. My evidence focuses on the recommendations that

<sup>&</sup>lt;sup>1</sup> Outlined in the Introduction to Chapter 11 of the Canterbury Regional Policy Statement.

are important in giving effect to the CRPS and generally follows the structure of the s42A report.

#### Definition of "High Hazard Areas" (HHAs)

- 28 The Regional Council sought amendments to the definition of HHAs in the pTDP to better align with the CRPS.
- 29 Mr Willis recommended changes to the notified definition that generally align with the CRPS definition but adopt a different approach to coastal inundation. At [7.5.4] of the s42A report, Mr Willis comments that he considers the CRPS definition unhelpful because it includes any amount of sea water inundation, when small infrequent amounts should not be "high hazard". I agree that the CRPS definition is ambiguous with respect to coastal inundation.
- 30 The approach adopted, in the recommended definition, is that regardless of the source of the flooding (fluvial, pluvial or coastal) it becomes an HHA when the water depth and velocity meet specified parameters.
- 31 I have discussed the definition with Mr Griffiths, and I agree with his view that the recommended definition provides greater clarity, particularly in respect of coastal inundation.

#### Definition of "Liquefaction Awareness Area" (LAA)

- 32 The Regional Council requested changes to the definition of LAA. It sought the removal of reference to land being "at risk" from liquefaction and lateral spreading. Instead, the Regional Council requested that the wording state that an LAA means land where liquefaction and lateral spreading are possible during an earthquake. In addition, the Regional Council sought to clarify that site specific assessment is required to determine the <u>actual</u> level of risk to property. At [7.6.4] of the s42A report, Mr Willis recommends accepting this submission, which I support.
- 33 At [7.39.9] Mr Willis recommends excluding the property of submitter 179.4 (Barkers Fruit) from the liquefaction overlay, while noting that the submitter presented no evidence to support this. He states he has done this because he believes the overlay on the Barker's property is potentially a result of the scale at which the assessments were

undertaken. The liquefaction overlay was created by technical experts in this field.

I note that Mr Willis has rejected submissions to change the flood overlay because of a lack of technical evidence that supports the requested changes<sup>2</sup>. I support this approach and in my opinion any change to a scientifically based overlay should only occur if it is supported by technical evidence. Accordingly, I recommend that submission 179.4 (Barkers Fruit) be rejected. This will ensure that a technical assessment is required to determine whether the submitters site is affected by liquefaction. In terms of Section 32AA of the RMA, this will impose an additional cost on the landowner. However, that cost will be insignificant compared to the costs of any damage to the property in the event of a liquefaction event. Accordingly, it is considered that it is more effective and efficient to leave the liquefaction overlay on the submitter's property

#### Definition of "overland flow path"

- 35 The Regional Council requested the deletion of this definition. The submission stated that, as notified, the definition was not clear, and that a definition was not required.
- 36 At [7.9.3] of the s42A report Mr Willis recommends amending rather than deleting the definition.
- 37 I am not an expert in this topic and rely on the evidence of Mr Griffiths to articulate why the reference to overland flow path is unnecessary.

#### Flood Assessment Overlay (FAO)

38 The Regional Council supported the general approach that TDC has taken to include a flood assessment overlay that triggers the relevant plan provisions. However, they also requested amendments to the FAO to encompass a wider area potentially subject to flooding. The information provided, to TDC, by Mr Griffiths in his memo dated 28 February 2025 shows that the maps in the notified plan do not capture all areas that have potential to flood.

<sup>&</sup>lt;sup>2</sup> Paragraphs 7.38.7 – 7.38.9 of the s42A report.

- 39 I consider that mapping is an effective tool to identify areas of land that are potentially subject to flooding, including HHAs. It can also assist councils to give effect to the policies in the CRPS that require the avoidance or mitigation of risk associated with new subdivision, use and development in these areas. However, this approach is only effective if the flood overlay is up to date.
- 40 In my opinion, if some areas that are identified as having potential to flood are not shown on the FAO, it reduces the ability to avoid new subdivision, use and development in accordance with the CRPS policy framework.
- 41 Mr Willis notes, at [7.38.5] of his s42A report, that the Regional Council did not provide proposed amended maps with its submission. Instead, as noted above, these maps were provided by Mr Griffiths in a memo that outlined the methodology behind the maps, prior to the completion of the s42A report. While the submission requested expansion of the maps to encompass a wider area, properties covered by the revised mapping could not be identified at that stage.
- 42 In Mr Griffiths' evidence, he explains the rationale behind the mapping and the challenges associated with development of an FAO. I have relied on his expertise in these matters.
- 43 At [7.38.13] Mr Willis states that an additional 1,655 properties will be covered if the revised mapping is adopted. The revised mapping indicates that these properties are potentially subject to flooding now, irrespective of whether they are included in the pTDP mapping.
- I consider that including these properties in the FAO allows the property owners to make informed decisions about subdivision, use and development. A site-specific assessment of the property will identify whether it is in an HHA or not. If the property is outside the HHAs, or it is within an urban zoned area, a minimum finished floor level will be specified to reduce the risk of flooding for any hazard sensitive building in that area. While there is a cost to this, the cost is low in comparison to the investment made in any new building that may be subject to flooding and the potential cost associated with a building being flooded.
- 45 I acknowledge that some property owners may view being included in an FAO as negative. However, I agree with Mr Willis that identifying these

properties is beneficial given the life and property risks associated with developing in areas subject to flooding.

- 46 I understand that in both Selwyn and Waimakariri Districts, revised flood assessment mapping was introduced during the hearings on those provisions (as evidence in Selwyn and as a joint witness statement in Waimakariri). The process of revising the maps through the hearings process is therefore not unprecedented.
- 47 On balance, I consider the extended mapping supplied by Mr Griffiths identifies properties potentially subject to flooding and that this information should be used as the basis for the FAO. Adopting this approach will allow property owners to make informed decisions about their property and provide benefits for minimising effects of flooding on their structures and infrastructure. However, ultimately the process for including this information is a matter for the District Council.

#### Natural hazard mitigation works

48 Ms Irvine has provided separate evidence to support the Regional Council request for further amendments to the pTDP to facilitate community flood and erosion protection efforts by the Regional Council. Ms Irvine is the Team Leader for Rivers Planning and has been providing resource management advice to the Rivers team for 12 years. She provides expertise about the operational planning aspects of the Regional Council's flood and erosion protection schemes.

### REGIONAL COUNCIL'S INTEREST IN THE DRINKING WATER PROTECTION (DWP) CHAPTER OF THE PTDP

- The Regional Council made submissions in support of the following pTDP DWP plan provisions: DWP-O1, DWP-P1 & P2 & DWP-R1-R3.
   For all but DWP-R3, we requested that the provisions were retained as notified or the original intent was preserved.
- 50 Mr Willis has recommended changes to DWP-P2 and DWP-R2. I support the change to DWP-P2 as the original intent is preserved. I agree with Mr Willis' reasoning for the changes he is recommending to DWP-R2. I consider that the changes make the rule clearer while still giving effect to the direction of the CRPS.

- 51 TDC sought amendments to the DWP rules or the provision of additional rules that create a non-complying activity status, within Drinking Water Protection Areas, for: hazardous facilities, earthworks, composting facilities, buildings that require septic/sewage facilities, offal pits, silage storage, vegetation clearance, exotic tree planting/plantation forestry and intensive primary production. Nine further submitters opposed this submission for a number of reasons, including questions over jurisdiction and the need to be consistent with the Canterbury Land and Water Plan (**CLWRP**). The Regional Council did not make a further submission.
- 52 The Regional Council did not make a further submission on the TDC request for new rules. However, some further submitters have raised the CLWRP and Regional Council role in regulating water quality protection. To assist the panel, I thought it would be useful to provide some information on the activity status given to the activities identified in [49] in the CLWRP and to provide a high-level synopsis of roles in this area.
- 53 While some further submitters question TDC's jurisdiction to make rules that control land use activity to protect drinking water quality, both regional and district councils have a legislative role in protecting drinking water quality. When processing resource consents, under the RMA, all local authorities including regional councils are required to have regard to the effects of proposed activities on the source of drinking water supplies registered under the Water Services Act 2021<sup>3</sup> (WSA). In addition, local authorities are required to have regard to the risks that a proposed activity may pose to a drinking water supply identified in a source water risk management plan prepared in accordance with the WSA<sup>4</sup>.
- 54 The CRPS includes policy to avoid, remedy or mitigate adverse effects of changes in land uses on the quality of fresh water by controlling changes in land uses to ensure water quality standards are maintained or improved.<sup>5</sup> Method 2, specified for implementing this policy is to require local authorities to work together to manage the adverse effects of land uses on freshwater quality, including appropriate controls on land uses in district or regional plans.

<sup>&</sup>lt;sup>3</sup> s104G(a) RMA.

<sup>&</sup>lt;sup>4</sup> s104G(b).

<sup>&</sup>lt;sup>5</sup> CRPS Policy 7.3.7(2).

I agree with the further submitters that there are instances where there is overlap between the CLWRP and the changes proposed to the pTDP. I have detailed the relevant CLWRP provisions in **Appendix 3**, for the benefit of the Hearings Panel. I note both Councils are entitled to include rules in their plans to achieve their objectives in relation to drinking water quality management, and I support TDC's intent in doing so. I also note that there is potential for confusion to arise for resource users, through the overlapping requirements.

### REGIONAL COUNCIL'S INTEREST IN THE ACTIVITIES ON THE SURFACE OF WATER CHAPTER OF THE PTDP

56 The Regional Council does not have direct responsibility for managing activities on the surface of water, under the RMA. However, it does have navigation and safety roles in relation to rivers. The Regional Council also has an interest in the management of activities on the surface of water given its related responsibilities for the protection of ecosystems and indigenous biodiversity, beds of lakes and rivers and their riparian zones, and landscape values. Activities on the surface of the water can have adverse effects on these values and as such they indirectly relate to the functions of the Regional Council.

#### **RESPONSE TO THE S42A REPORT – SURFACE WATER ACTIVITIES**

- 57 The Regional Council made one submission to this section of the pTDP. That submission was in support of ASW-O1 and requested that the objective be retained as notified or the original intent preserved.
- 58 In response to a submission from Jet Boating, requesting that the objective be amended to protect against more than minor adverse effects of activities on the surface of water, Mr Maclennan, the s42A officer, has recommended that the objective be amended to: "The ecological, recreational, natural character and cultural values of the District's rivers are protected from the adverse effects of <u>inappropriate</u> activities on the surface of water."
- 59 Mr Maclennan agreed that the requirement to protect against all adverse effects was overly restrictive and not required to ensure that the values of the district's rivers are protected. However, he disagreed that the qualifier "more than minor" was appropriate to be included in an objective. He reasoned that adding those words would create an effects

test within the objective that is better suited to a case-by-case assessment within a resource consent process. He also commented that the use of those words could potentially allow adverse effects that, while minor individually, may cumulatively compromise the values of the rivers over time.

- 60 While I accept Mr Maclennan's reasons for rejecting the addition of "more than minor" adverse effects. I disagree with the change of focus from "adverse effects" to "inappropriate activities". I understand the intention is to avoid having an objective that does not allow for any adverse effects, no matter how minor. However, in my opinion it is not the activity that should be the focus of the objective, but the degree to which the effects of the activity impact on the values that needs to be addressed. An activity, such as jet boating can operate in a way that does not detract from the values the objective is trying to protect. Equally, it can operate in a way that compromises those values.
- 61 When the provisions of the chapter are read as a whole, the objective should provide a clear direction that is not intended to capture minor adverse effects. The policies that sit below the objective define what adverse effects could compromise the specified values of the District's rivers. The first two policies seek to enable activities on the surface of water, while the final four policies introduce limitations on activity, to protect ecological recreational, natural character or cultural values of the rivers. The rules provide specific constraints on activities based on those policies.
- 62 Given that framework, I recommend the following rewrite of the objective to capture the direction to protect the listed values, while making it clear that some adverse effects may be acceptable:

The ecological, recreational, natural character and cultural values of the District's rivers are protected from the <u>inappropriate</u> adverse effects of <u>inappropriate</u> activities on the surface of water.

Deidre Francis

Deidre Francis 09 April 2025

Appendix 1 – Amendments sought to the pTDP through the Regional Council submission on the Natural Hazards and Activities on the Surface of Water chapters

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
NH-R1	<ul> <li>Matters of discretion are restricted to:</li> <li>1. Any adverse effects on the rate of flow and direction of overland flow path(s); and</li> <li>2. Any adverse effects on property from blockage of or disturbance to the overland flow path(s) and</li> <li>3. The effectiveness and potential adverse effects of any proposed mitigation measures.</li> </ul>	<ul> <li>Matters of discretion are restricted to: <ol> <li>Any adverse effects on the rate of flow and direction of overland flow path(s); and</li> <li>Any adverse effects on property from blockage of or disturbance to the overland flow path(s) <u>or displacement of floodwater;</u> and</li> <li><u>Any increased flood risk for people, property, or public spaces; and</u></li> </ol> </li> <li>4.The effectiveness and potential adverse effects of any proposed mitigation measures.</li> </ul>	<ul> <li>Matters of discretion are restricted to:</li> <li>1. Any adverse effects on the rate of flow and direction of overland flow path(s); and</li> <li>2. Any adverse effects on property from blockage of or disturbance to the overland flow path(s) or displacement of floodwater; and</li> <li>3. 1. Any increased flood risk for people, property, or public spaces; and</li> <li>4.2. The effectiveness and potential adverse effects of any proposed mitigation measures.</li> </ul>
	No Notes in notified version	Notes: <u>1. A Flood Risk Assessment Certificate</u> issued in accordance with NH-S1 will identify if the site is subject to flooding in events up to and including a 0.5% AEP flood event.	Notes: <u>1. A Flood Risk Assessment Certificate</u> <u>issued in accordance with NH-S1 will</u> <u>identify if the site is subject to flooding in</u> <u>events up to and including a 0.5% AEP</u> <u>flood event.</u>
All Restricted Discretionary Activities that include matters relating to diversion and displacement	Includes: NH-R4, NH-R5, NH-S1, CE- R9 – of the rules recommended to remain following the s42A report	including NH-R4, NH-R5, SUB-RX, NH-RX, NH-S1, CE-R9, NH-RX in PORTZ, CE-RX in PORTZ, SUB-RX in PORTZ	Remove all matters of discretion relating to diversion and displacement effects including NH-R4, NH-R5, SUB-RX, NH-RX, NH-S1, CE- R9, NH-RX in PORTZ, CE-RX in PORTZ, SUB-RX in PORTZ

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
Definition Overland flow path	Overland flow path: the route along which stormwater flows over land in a rain event and excludes permanent watercourses or intermittent rivers or streams.	Overland flow path: the route <u>at a low point of</u> <u>terrain</u> along which stormwater flows over land in a rain event and excludes permanent watercourses or intermittent rivers or streams.	Delete reference to "overland flow path" wherever it appears in the pTDP including the Introduction to the Natural Hazards Chapter, NH-R1, NH-R4, NH-R5, SUB-RX, NH-RX, NH- S1, CE-R9, NH-RX in PORTZ, CE-RX in PORTZ, SUB-RX in PORTZ & Flood Assessment Certificate, Definitions.
Flood Assessment Certificate wording	<ul> <li>Flood Risk Assessment Certificate means a certificate issued by Timaru District Council which specifies:</li> <li>a. the flood event risk level for specific land (being either land not subject to flooding in a 0.5% AEP flood event, or land subject to flooding in a 0.5% AEP flood event, or land within a High Hazard area); and</li> <li>b. where a. above identifies that the specific land is subject to flooding in a 0.5% AEP flood event, the minimum finished floor level for any new building or structure(or part thereof) on the specific land to provide at least 300mm freeboard above the flood level in a 0.5% AEP flood event; and</li> <li>c. if the specific land is within 150m of a stopbank, the minimum finished floor level for any new building or structure (or part</li> </ul>	<ul> <li>Flood RISK-Assessment Certificate means a certificate issued by Timaru District Council which specifies: <ul> <li>a. the flood event risk level for specific land (being either land not subject to flooding in a 0.5% AEP, flood event, or land subject to flooding in a 0.5% AEP flood event, or land within a high hazard area); and</li> <li>b. where a. above identifies that the specific land is subject to flooding in a 0.5% AEP flood event, the minimum finished floor level for any new building or structure (or part thereof) on the specific land to provide at least 300mm freeboard above the flood level in a 0.5% AEP flood event; and</li> <li>c. if the specific land is within 150m of a stopbank, the minimum finished floor level for any new building or structure</li> </ul> </li> </ul>	<ul> <li>1. A Flood Assessment Certificate is issued by the Council (that is valid for 3 years from the date of issue) which specifies: <ul> <li>a. <u>if the site(s) is within a high hazard</u> <u>area; andthe flood event risk level for</u> <u>specific land, being:</u></li> <li>i. land not subject to flooding in a 0.5% AEP flood event, or</li> <li>ii. land subject to flooding in a 0.5% AEP flood event, or</li> <li>iii. land within a high hazard area</li> <li>iv. or for sea water inundation, land subject to flooding in a 1% AEP storm surge event, coupled with sea level rise based on an Representative Concentration Pathway 8.5 climate change scenario; and</li> </ul> </li> <li>b. where the site is not within a high hazard area, or where the site is within an urban zoned area, where 1(a)(ii) above identifies that the specific land is subject to flooding in a 0.5% AEP flood event, the <u>a</u> minimum finished floor</li> </ul>

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
	thereof) on the specific land to avoid risk from a stopbank failure; and d. whether the specific land is located within an overland flow path.	(or part thereof) on the specific land to avoid risk from a stopbank failure; and etc. whether the specific land is located within an overland flow path	<ul> <li>level for any new building or structure (or part thereof) on the specific land to provide that is at least 300mm freeboard above the flood level in a 0.5% AEP flood levelevent; and</li> <li>c. as required for NH-R6, if the site is located on land that is subject to flooding in a 0.5% AEP flood event whether the specific land is located within an overland flow path.</li> <li>2. The AEP flood event risk level, minimum floor levels and overland flow path locations are to above will be determined by reference to:</li> <li>a. The most up to date models, maps and data held by Timaru District Council and Canterbury Regional Council; and</li> <li>b. Any information held by, or provided to, Timaru District Council or Canterbury Regional Council that relates to flood risk for the specific land; and</li> <li>c. Will account for the cumulative effects of climate change over the next 100 years (based on latest national guidance) and all sources of flooding (including fluvial, pluvial, and coastal).</li> <li>Note: A minimum finished floor level will not be provided in the certificate for sites located within a High Hazard Area outside of urban zoned areas. Rather, these will need to be determined through a resource consent process.</li> </ul>

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
183.24			Simplify provisions across Natural Hazards and Coastal Environment Chapter as a consequence, if revised mapping is used for the flood assessment overlay and the recommended High Hazards definition is adopted. (refer to Nick Griffiths' evidence)
NH-R3	Activity status: Permitted	Activity status: Permitted	Activity status: Permitted
183.40	Where:	Where:	Where:
	PER-1	<u>PER-1</u>	<u>PER-1</u>
	Natural hazard mitigation works is: within 25m of the existing alignment or location vertically and horizontally and	The activity is limited to maintenance, replacement or upgrading of existing natural hazard mitigation works and	The activity is limited to maintenance, replacement or upgrading of existing natural hazard mitigation works within
	PER-2	PER-1 <u>2</u>	existing river control schemes and undertaken by or on behalf of the Crown,
	The footprint of the existing natural hazard mitigation works is not increased by more than 25%	<u>The</u> natural hazard mitigation works is: within 25m of the <del>existing</del> alignment or location vertically and horizontally <u>of existing natural</u>	Canterbury Regional Council or the Council, and OR PER-4 2
	PER-3	hazard mitigation works; and	-
	The activity is undertaken by or on behalf of the Crown, Canterbury Regional Council or the Council.; and	PER- <del>2 3</del> The footprint of the <u>existing</u> natural hazard mitigation works is not increased by more than	The activity is limited to maintenance, replacement or upgrading of existing natural hazard mitigation work that:
	PER-4	25%	Is within 25m of the <del>existing</del> alignment or location vertically and horizontally <u>of</u>
	If the site is subject to flooding in a 0.5%	PER-3 <u>4</u>	existing natural hazard mitigation works;
	AEP rainfall event, NH-S2 is complied with.	The activity is undertaken by or on behalf of the Crown, Canterbury Regional Council or the Council.; <del>and</del>	and PER-2 3
		PER-4	Does not increase the footprint of the existing natural hazard mitigation works is
		If the site is subject to flooding in a 0.5% AEP	not increased by more than 25%
		rainfall event, NH-S2 is complied with.	PER-3- <u>4</u>

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
	Activity status where compliance not achieved with PER-1, PER-1 or PER-2 or PER-3 or PER-4: Restricted	Activity status where compliance not achieved with <del>PER-1</del> , PER-2 or PER-3 or PER-4: Restricted Discretionary	The activity is undertaken by or on behalf of the Crown, Canterbury Regional Council or the Council <u>.</u> ; and
	Discretionary	Matters of discretion are restricted to:	PER-4
	<ul> <li>Matters of discretion are restricted to:</li> <li>1. the likely effectiveness of the natural hazard mitigation works and the need for them; and</li> <li>2. the extent of any adverse social, cultural and environmental effects, including from indigenous vegetation clearance, vegetation planting, and earthworks on any sensitive environments, including significant natural areas, natural character areas, riparian margins, sites and areas of significance to Māori and within any ONF or ONL overlay; and</li> <li>3. any potential adverse effects of from diverting or blocking overland flow path(s), including upstream and downstream flood risks; and</li> <li>4. any increased flood risk for people, property, infrastructure or public spaces; and</li> <li>5. the extent to which alternative locations and options for the natural hazard mitigation works</li> </ul>	<ol> <li>the likely effectiveness of the natural hazard mitigation works and the need for them; and</li> <li>the extent of any adverse social, cultural and environmental effects, including from indigenous vegetation clearance, vegetation planting, and earthworks on any sensitive environments, including significant natural areas, natural character areas, riparian margins, sites and areas of significance to Māori and within any ONF or ONL overlay; and</li> <li>any potential adverse effects of from diverting or blocking overland flow path(s), including upstream and downstream flood risks; and</li> <li>any increased flood risk for people, property, infrastructure or public spaces; and</li> <li>the extent to which alternative locations and options for the natural hazard mitigation works have been considered and the merits of those; and</li> <li>any positive effects of the proposal on the community.</li> </ol>	<ul> <li>If the site is subject to flooding in a 0.5% AEP rainfall event, NH-S2 is complied with. 53</li> <li>Activity status where compliance not achieved with PER-1, PER-1 or PER-2-or PER-3 or PER-4: Restricted Discretionary</li> <li>Matters of discretion are restricted to:</li> <li>2. the likely effectiveness of the natural hazard mitigation works and the need for them; and</li> <li>3. the extent of any adverse social, cultural and environmental effects, including from indigenous vegetation clearance, vegetation planting, and earthworks on any sensitive environments, including significant natural areas, natural character areas, riparian margins, sites and areas of significance to Māori and within any ONF or ONL overlay; and</li> <li>4. any potential adverse effects of from diverting or blocking overland flow path(s), including upstream and downstream flood risks; and</li> <li>5. any increased flood risk for people, property, infrastructure or public spaces; and</li> </ul>

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
	have been considered and the merits of those; and 1. any positive effects of the proposal on the community. Activity status where compliance not achieved with PER-4 PER-1: Restricted Discretionary	<ul> <li>Activity status where compliance not achieved with PER-4 PER-1: Restricted Discretionary Where</li> <li><u>RDIS-1</u></li> <li><u>Any new natural hazard mitigation works:</u></li> <li>a. <u>are undertaken by or on behalf of the Crown, Regional Council, or the Council; or</u></li> <li>b. <u>are undertaken by or on behalf of the Port of Timaru and are located within 310m of PREC7;</u></li> <li><u>Matters of discretion are restricted to:</u> <ol> <li><u>those matters set out for non compliance with PER-2, PER-3 or PER-4.</u></li> </ol> </li> <li><u>Activity status where compliance not achieved with RDIS-1: Discretionary</u></li> <li><u>Matters of discretion are restricted to:</u></li> <li>the relevant matters of discretion of any infringed standard.</li> </ul>	<ul> <li>6. the extent to which alternative locations and options for the natural hazard mitigation works have been considered and the merits of those; and</li> <li>7. any positive effects of the proposal on the community.</li> <li>Activity status where compliance not achieved with PER-4 PER-1: Restricted Discretionary</li> <li>Where</li> <li>RDIS-1</li> <li>Any new natural hazard mitigation works:</li> <li>c. are undertaken by or on behalf of the Crown, Regional Council, or the Council; or</li> <li>d. are undertaken by or on behalf of the Port of Timaru and are located within 310m of PREC7;</li> <li>Matters of discretion are restricted to:</li> <li>2. those matters set out for non compliance with PER-2, PER-3 or PER-4.</li> <li>Activity status where compliance not achieved with RDIS-1: Discretionary</li> <li>Matters of discretion are restricted to:</li> <li>1. the relevant matters of discretion of any infringed standard.</li> </ul>
CE-R9	Activity status: Permitted	Activity status: Permitted	Activity status: Permitted
183.128	Where:	Where:	Where:

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
	PER-1	PER-1	PER-1
			<ul> <li>(in red)</li> <li>PER-1 The activity is limited to maintenance, replacement, or upgrading of existing natural hazard mitigation works are for the operation, maintenance, replacement or upgrading of these works; and within existing river control schemes and undertaken by or on behalf of the Crown, Canterbury Regional Council or the Council, and OR PER-4 2 The activity is limited to maintenance, replacement or upgrading of existing natural hazard mitigation works is occurs that: <ul> <li>(a) Is within 25m of the existing alignment or location vertically and horizontally of existing natural hazard mitigation works; and </li> <li>PER-2.3</li> <li>(b) Does not increase the footprint of the existing natural hazard mitigation works is</li> </ul></li></ul>
			not increased by more than 25% <b>PER-3 4</b> The activity is undertaken by or on behalf of the Crown, Canterbury Regional Council or the Council <u>.</u> ; and

Provision	As notified	Council s42A Drafting	Canterbury Regional Council Relief Sought (in red)
CE-R14 183.131	N/A	Note: works in the beds of lakes and rivers, are also within the jurisdiction of the Canterbury Regional Council and	Note: this rule does not apply to works in the coastal marine area or beds of lakes and rivers, as these are also managed within the jurisdiction of the Canterbury Regional Plans, which <u>Council and may require resource</u> consent from that Council.
DWP-R3 183.142	N/A	Note: works in the beds of lakes and rivers, are also within the jurisdiction of the Canterbury Regional Council and	Note: this rule does not apply to works in the beds of lakes and rivers, as these are also managed within the jurisdiction of the Canterbury Regional Plans, which Council and may require resource consent from that Council.
ASW-O1 183.105	Protecting the values of the District's rivers The ecological, recreational, natural character and cultural values of the District's rivers are protected from the adverse effects of activities on the surface of water	Protecting the values of the District's rivers The ecological, recreational, natural character and cultural values of the District's rivers are protected from the adverse effects of <u>inappropriate</u> activities on the surface of water.	The ecological, recreational, natural character and cultural values of the District's rivers are <u>not compromised by protected from</u> the adverse effects of <u>inappropriate</u> activities on the surface of water.

### Appendix 2 – Regional Council Response to recommendations set out in s42A reports

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response	
Natural Hazards Chapter & relevant provisions from other chapters				
Natural Hazard Mitigation Works Definition	7.7.1 - 7.7.7 Recommendation – 7.7.5	Accept	Support	
Earthquake awareness fault areas	7.8.1 - 7.8.13 Recommendation - 7.8.11	Accept	Support	
Natural hazard sensitive activities definition 183.173	7.8.1 - 7.8.13 Recommendation - 7.8.11	Accept in part	Support	
Overland flow path 183.6	7.9.1 - 7.9.6 Recommendation - 7.9.4	Accept in part	Recommend deleting this definition and deleting this phrase wherever it appears in the pTDP including NH-R1, NH-R4, NH-R5, SUB-RX, NH-RX, NH-S1, CE-R9, NH-RX in PORTZ, CE-RX in PORTZ, SUB-RX in PORTZ & Flood Assessment Certificate. (Refer to Nick Griffiths' evidence)	
Liquefaction Awareness Area	7.6.1 - 7.6.6 Recommendation - 7.6.4	Accept	Support	

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
183.7			
Definition – High Hazard Area	7.5.1 - 7.5.8	Accept	Support
183.14	Recommendation - 7.5.6		
Natural hazard mitigation works – operation,	Paras 7.11.11 & 7.11.12	Accept in Part	Further amendments requested to NH-R3 to
maintenance, repair, replacement and	Recommendations 7.11.20 &		give effect to this submission.
upgrading of existing works and other rules in	7.11.25		
the Plan concerning earthworks and			
vegetation clearance.			
183.5			
Natural Hazards General	Paras 7.11.11 & 7.11.12	Accept in Part	Further changes recommended refer to
183.24	Recommendations 7.11.20 & 7.11.25		Appendix 1 and evidence of Nick Griffiths
NH- Natural Hazards General	Para 7.11.3	Accept	Support
183.25	Recommendation 7.11.19 & 7.11.22		
NH- Natural Hazards General	Para 7.11.14	Accept	Support
Submitter # 183.26	Recommendation 7.11.19 and 7.11.23		
NH- Natural Hazards General	Para 7.11.15	Accept	Support
183.27	Recommendation 7.11.19		
NH-O1 Areas subject to natural hazards.	7.13.1 - 7.13.14	Accept in part	Support

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
183.29	Submission not addressed under NH-O1 - Recommendations made to change this objective:		
NH-O2 Regionally Significant Infrastructure.	7.14.1 - 7.14. 14	Accept in part	Support
183.30	Submission not addressed here.		
	Recommendations made to change this objective:		
NH-O3: Natural hazard mitigation works	7.15.9 Recommendation 7.15.11	Accept in part	Support
183.31			
NH-P3 - Role of natural features and	7.17.1 - 7.17.6	Accept in part	Support
vegetation in hazard mitigation	Submission not addressed here.		
183.32	Changes recommended to NH-P3		
NH-P4	7.18.6, 7.18.11	Accept	Support
183.33	Recommendation 7.18.14		
NH-P5	7.19.5 & 7.19.6	Accept in part	Support
183.34	Recommendation 7.19.10 & 7.19.12		

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
NH-P7 - Slope stability and subsidence risk 183.35	NH-P7 is not addressed at all in the s42A report. But it remains unchanged in Appendix 1.	Accept	Support
NH-P9 - Natural hazard mitigation works	7.22.4 & 7.22.7	Accept	Support
183.36	Recommendation 7.22.9		
NH-P10	7.23.1 - 7.23.10	Accept in part	Support
183.37	Submission not included. Amendments have been recommended for NH-P10		
Planning Maps – Flood Hazard Risk	7.38.1 - 7.38.22	To be determined after	Adopt maps included in Nick Griffiths'
183.28		evidence is received	evidence as basis for FAO
NH-R1	7,27.6 & 7.27.14	Accept in part	Further changes recommended re matters
183.38	Recommendations 7.27.19 &		of discretion, and deletion of first note – see
	7.27.21		Appendix 1 and Nick Griffiths' evidence.
NH-R2	7.28.4 & 7.28.8	Accept in part	Support
183.9	Recommendation 7.28.10		
NH-R3	7.29.6 & 7.29.8	Accept in part	Support amendments to title of Rule.
183.40			

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
	Recommendations 7.29.11 & 7.29.13		Further amendments recommended see Appendix 1 and Jolene Irvine's evidence
NH-RX 183.41	7.26.1 – 7.26.5	Reject	Amended wording recommended for NH-R3 to address this – see Appendix 1 and Jolene Irvine's evidence – wording for PA for small scale one-off work to protect people and property)
NH-R4 183.42	7.30.8 & 7.30.14 Recommendations 7.30.16 & 7.30.19		Delete matters of discretion addressing displacement and diversion and overland flow paths.
NH-R5 183.43	7.31.5 & 7.31.9 Recommendations 7.31.11 & 7.31.13	Accept	Delete matters of discretion addressing displacement and diversion and overland flow paths.
NH-R6 183.44	7.32.6 & 7.32.13 Recommendations 7.32.16 & 7.32.18	Accept in part	Delete matters of discretion addressing displacement and diversion
NH-R7 183.45	7.33.7 & 7.33.12 Recommendation 7.33.15	Accept in part	Support

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
NH- R8	7.34.6 & 7.34.12	Accept in part	Support
183.46	Recommendations 7.34.14, 7.34.16 & 7.34.17		
NH-R9	7.35.3 & 7.35.5	Accept in part	Support
183.48	Recommendations 7.35.7 & 7.35.10		
NH-S1	7.36.4 & 7.36.7	Accept	Amendments recommended, see Appendix
183.50	Recommendations 7.36.9 & 7.36.11		1 and Nick Griffiths' evidence
SASM-R1	Not addressed in s42A report	?	?
Providing for natural hazard mitigation works in the SASM overlays – NH-R3			
183.65			
ECO-R1	7.11.11 & 7.11.12	Accept in part	Support
183.76	Recommendations 7.11.20, 7.11.25 & 7.11.26		
ECO-R2	7.11.11 & 7.11.12	Accept in part	Support
183.77	Recommendations 7.11.20, 7.11.25 & 7.11.26		

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response		
NATC-P5	7.7.1 – 7.7.7	Accept	Support		
183.84	Recommendation 7.7.5				
NATC-R1	7.11.1 & 7.11.12	Accept in part	Support		
183.85	Recommendation 7.11.20, 7.11.25 & 7.11.26				
NATC-R2	7.11.1 & 7.11.12	Accept in part	Support		
183.86	Recommendation 7.11.20, 7.11.25 & 7.11.26				
NATC-R3	7.7.1 – 7.7.7	Accept	Support		
	Recommendation 7.7.5				
General – Flood Assessment Certificate	8.3.9 & 8.3.17	Accept in part	Support		
183.108	Recommendations 8.3.26 & 8.3.29				
General – High Hazard Area Definition	8.3.10 & 8.3.18	Accept	Support		
183.109	Recommendations 8.3.25 & 8.3.30				
Natural Features and landscapes	Natural Features and landscapes				
NFL-R2	7.11.1 & 7.11.12	Accept in part	Support		

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
	Recommendations 7.11.20, 7.11.25 & 7.11.26		
NFL – R5	7.11.1 & 7.11.12	Accept in part	Support
183.91	Recommendations 7.11.20, 7.11.25 & 7.11.26		
Coastal Environment Chapter			
General	8.3.8 & 8.3.19	Accept in Part	Support
183.107 & 183.110	Recommendations 8.3.26 & 8.3.28		
General	8.3.10 & 8.3.18	Accept	Support
183.109	Recommendation 8.3.25 & 8.3.30		
CE-01	Submission not in s42A report but no	Accept	Support
183.111	changes recommended		
CE-02	Submission not in s42A report but no	Accept	Support
183.112	changes recommended		
CE-03	8.6	Accept in part	Support
183.113			
CE-O4	8.7.6 & 8.7.9	Accept in part	Support

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
183.114	Recommendations 8.7.11 & 8.7.13		
CE-P1	Submission not in s42a report but no	Accept in part	Support
183.115	changes recommended		
CE-P3	Submission not in s42a report	Accept in part	Support
183.117	change recommended to take climate change into account.		
CE-P4	8.13.5 & 8.13.6	Accept in part	Support
183.118	Recommendations 8.13.7 & 8.13.8		
CE-P5	Submission not in s42a report but no	Accept in part	Support
183.119	changes recommended		
CE-P6	Submission not in s42a report but no	Accept in part	Support
183.120	changes recommended		
CE-P7	8.15	Accept in part	Support
183.121			
CE-P8	8.16.3 & 8.16.5	Accept	Support
183.22	Recommendations 8.16.7 & 8.16.8		
CE-P9	8.17.5 & 8.17.8	Accept	Support

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
183.23	Recommendations 8.17.5 & 8.17.8		
CE-P10	8.18.8 & 8.18.16	Accept	Support
183.24	Recommendations 8.18.17 & 8.18.20		
CE-R4	8.24.10 & 8.24.23	Accept in part	Support
183.125	Recommendation 8.24.27		
CE-R7	8.27.6 & 8.27.11	Accept in part	Changes needed if revised mapping and
183.126	Recommendations 8.27.13 & 8.27.14		High Hazard definition adopted as per Nick Griffiths' evidence.
CE-R8	8.28.5 & 8.28.10	Accept in part	Changes needed if revised mapping and
183.127	Recommendations 8.28.13 & 8.28.14		High Hazard definition adopted as per Nick Griffiths' evidence.
CE-R9	8.29.4 & 8.29.5	Accept in part	Delete matters of discretion addressing
183.128	Recommendations 8.29.7, 8.29.8 & 8.29.9		displacement and diversion and overland flow paths.
			Further changes requested to permitted activity regarding natural hazard mitigation works

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
CE-R11	8.30.4 & 8.30.8	Accept in part	Support
183.129	Recommendations 8.30.12 & 8.30.14		
CE-R12	8.31.5 & 8.31.9	Accept in part	Add note regarding natural hazard
183.130	Recommendations 8.31.13, 8.31.14 & 8,31,15		mitigation works
CE-R14	8.33.5 & 8.33.9	Accept in part	Support
183.131	Recommendations 8.33.10 & 8.33.11		
CE-S2	8.35.4 & 8.35.6	Accept in part	Support
183.132	Recommendations 8.35.7 & 8.35.10		
Mapping Coastal Erosion Overlay	8.38.4 & 8.38.5	Accept	Support
183.133	Recommendations 8.38.7 & 8.38.8		
Drinking Water Protection			
DWP-O1	Submission not addressed in s42A	Accept	Support
183.137	but objective is unchanged		

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response	
DWP-P1	Submission not addressed in s42A	Accept	Support	
183.138	but objective is unchanged			
DWP-P2	9.2.1 – 9.2.24	Accept in part	Support	
183.139				
DWP-R1	Submission not addressed in s42A	Accept	Support	
183.140	but objective is unchanged			
DWP – R3	9.4.1 -9.4.6	Accept in part	Add note regarding natural hazard	
183.142			mitigation works	
APP6 – Drinking water Protection Table 1	9.6.1 – 9.6.5	Reject	Accept but note there is a risk in retaining a	
183.2FS			numbers approach instead of a methodology approach.	
Public Access Chapter	-	•		
PA-P2	No changes	Accept	Support	
183.94				
PA-P4	7.7	Accept in part	Support	
Activities on the Surface of Water Chapter				
ASW-O1	8.3.1 - 8.3.9	Accept in part	Amend wording as per Appendix 1	
PA-P4 Activities on the Surface of Water Chapter				

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response
183.105	Recommendation 8.3.8		
Schedule 13 – Fish spawning areas	8.15	Accept in part	Support
Versatile Soil Chapter			
Definition	9.3	Accept	Support
183.12			
Entire Chapter including all provisions	9.3	Accept	Support
183.96			
VS-P1	9.3	Accept	Support
183.97			
Earthworks Chapter			
EW-P1	9.3.1 – 9.3.9	Accept in part	Support
183.134			
EW-P4	No recommended changes to this	Accept	Support
183.35	policy		
EW-R1	9.5.1 – 9.5.27	Accept in part	Support
183.136			

Our Submission #	Relevant s42A paragraph & recommendation #	Recommendation	Response	
Noise Chapter				
Noise-R8	8.12.7	Reject	Accept	
183.143				
General Submissions				
Building size references				
General – Footprint or gross floor area	Liz White – 7.1.8	Reject	Support	
183.1	Rachel Wilcox – 10.1.6	Accept in part	Support	
	Andrew Maclennan – 7.11	Accept in part	Support	
General – height of buildings measurement	Liz White – 7.1.8	Reject	Support	
183.4	Rachel Wilcox – 10.1.6	Accept in part	Support	
	Andrew Willis – 8.34	Accept	Support	
Definitions				
Urban Development and Urban Area	Definition no longer used in CE Chapter – submission reallocated to Hearing G – Urban Growth	N/A	Support	

APPENDIX 3 – Activities within a DWPZ requiring resource consent or prohibited, under the CLWRP

RESTRICTED	DISCRETIONARY	NON-COMPLYING	PROHIBITED
DISCRETIONARY			
Wastewater discharge	Discharge of vertebrate toxic	Discharge animal effluent	Graze stock in bed of river/lake
Discharge swimming pool/spa pool water	agent		Use of land for community wastewater treatment plant and
	Discharge of agrichemical		the discharge to land
Discharge from pit toilet (long drop)	Discharge solid animal waste/vegetative matter		Discharge municipal solid waste
Discharge of composted sewage	Stockholding area land use		
Offal pit	Effluent storage		
Refuse pit	Discharge drainage water from a		
Silage pit	drainage system into surface water, artificial watercourse,		
Discharge construction phase stormwater	constructed wetland or into/onto land		
Discharge of groundwater from dewatering	Use of land for new cemetery or extension		
Use of land for storage and use of hazardous substance in portable container.	Discharge liquid waste or sludge waste from industrial process etc.		
	Discharge of stormwater to surface water or land where it could enter surface water		
	Discharge of water or contaminants to land where could enter groundwater		

36			
	Discharge water tracer		
	Passive discharge of contaminants that results in concentration of contaminants in groundwater		

#### Appendix 4 – CRPS

#### Chapter 7 - Policies relevant to evidence

#### 7.3.7 Water quality and land uses

To avoid, remedy or mitigate adverse effects of changes in land uses on the quality of fresh water (surface or ground) by:

- identifying catchments where water quality may be adversely affected, either singularly or cumulatively, by increases in the application of nutrients to land or other changes in land use; and
- 2. controlling changes in land uses to ensure water quality standards are maintained or where water quality is already below the minimum standard for the water body, it is improved to the minimum standard within an appropriate timeframe.

#### Method to implement Policy 7.3.7

#### Local authorities:

Will: ...

2. Work together to manage the adverse effects of land uses on freshwater quality including appropriate controls on land uses in district or regional This may include adopting a holistic approach to the management of the impacts of development such as low impact urban design and development principles, and riparian management

# Chapter 11 – Natural Hazards Objectives and Policies relevant to evidence

# Objective 11.2.1 - Avoid new subdivision, use and development of land that increases risks associated with natural hazards.

New subdivision, use and development of land which increases the risk of natural hazards to people, property and infrastructure is avoided or, where avoidance is not possible, mitigation measures minimise such risks.

#### **Objective 11.2.3 Climate change and natural hazards**

The effects of climate change, and its influence on sea levels and the frequency and severity of natural hazards, are recognised and provided for.

# Policy 11.3.1 Avoidance of inappropriate development in high hazard areas

To avoid new subdivision, use and development (except as provided for in Policy 11.3.4) of land in high hazard areas, unless the subdivision, use or development:

- 1. is not likely to result in loss of life or serious injuries in the event of a natural hazard occurrence; and
- 2. is not likely to suffer significant damage or loss in the event of a natural hazard occurrence; and
- 3. is not likely to require new or upgraded hazard mitigation works to mitigate or avoid the natural hazard; and
- 4. is not likely to exacerbate the effects of the natural hazard; or
- 5. Outside of greater Christchurch, is proposed to be located in an area zoned or identified in a district plan for urban residential, industrial or commercial use, at the date of notification of the CRPS, in which case the effects of the natural hazard must be mitigated; or
- 6. Within greater Christchurch, is proposed to be located in an area zoned in a district plan for urban residential, industrial or commercial use, or identified as a "Greenfield Priority Area" on Map A of Chapter 6, both at the date the Land Use Recovery Plan was notified in the Gazette, in which the effect of the natural hazard must be avoided or appropriately mitigated; or 7. Within greater Christchurch, relates to the maintenance and/or upgrading of existing critical or significance infrastructure.

#### Methods:

#### Territorial authorities:

#### Will:

a. Outside of greater Christchurch: Set out objectives and policies, and may include methods in district plans, to avoid new subdivision, use and development that does not meet the criteria set out in Policy 11.3.1 clauses (1) to (5) for known high hazard areas excluding those areas subject to coastal erosion within the next 100 years and within the beds of lakes and rivers.

#### **CRPS** definition of High Hazards:

"High hazard areas" are:

- flood hazard areas subject to inundation events where the water depth (metres) x velocity (metres per second) is greater than or equal to 1, or where depths are greater than 1 metre, in a 0.2% AEP flood event.
- land outside of greater Christchurch subject to coastal erosion over the next 100 years; and
- land within greater Christchurch likely to be subject to coastal erosion including the cumulative effects of sea level rise over the next 100 This includes (but is not limited to) the land located within Hazard Zones 1 and 2 shown on Maps in Appendix 5 of this Regional Policy Statement that have been determined in accordance with Appendix 6; and
- 4. land subject to sea water inundation (excluding tsunami) over the next 100 years. This includes (but is not limited to) the land located within the sea water inundation zone boundary shown on Maps in Appendix 5 of this Regional Policy Statement.

When determining high hazard areas, projections on the effects of climate change will be taken into account.

#### Policy 11.3.2 Avoid development in areas subject to inundation

In areas not subject to Policy 11.3.1 that are subject to inundation by a 0.5% AEP flood event; any new subdivision, use and development (excluding critical infrastructure) shall be avoided unless there is no increased risk to life, and the subdivision, use or development:

- 1. is of a type that is not likely to suffer material damage in an inundation event; or
- 2. is ancillary or incidental to the main development; or
- meets all of the following criteria: a. new buildings have an appropriate floor level above the 0.5% AEP design flood level; and b. hazardous substances will not be inundated during a 0.5% AEP flood event;<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> A 0.5% annual exceedance probability (AEP) flood event is a flood event that has a 0.5% (or 1 in 200) chance of occurring in any given year. An event of this size would therefore be expected to occur once every 200 years **on average**, so can also be described as a 200 year average

provided that a higher standard of management of inundation hazard events may be adopted where local catchment conditions warrant (as determined by a cost/benefit assessment). When determining areas subject to inundation, climate change projections including sea level rise are to be taken into account

#### Methods:

#### **Territorial authorities:**

#### Will:

- 4. Set out objectives and policies and may include methods in district plans to avoid new subdivision, use and development of land in known areas subject to inundation by a 0.5% AEP flood event, other than in the circumstances determined in Policy 11.3.2 clauses (1) to (3).
- 5. Ensure that flooding hazards are assessed before any new areas are zoned or identified, in a district plan, in ways that enable intensification of use, or where development is likely to cause adverse effects.
- 6. Where there is a known flooding risk, include provision in their district plans that require a 5% AEP flood event to be determined, and its effects assessed, prior to new subdivision, use or development of land taking place. Where the territorial authority has adopted a standard less frequent than a 0.5% AEP flood event, the expected flow and effects of that less frequent AEP flood event will be determined.

#### Policy 11.3.4 Critical infrastructure

New critical infrastructure will be located outside high hazard areas unless there is no reasonable alternative. In relation to all areas, critical infrastructure must be designed to maintain, as far as practicable, its integrity and function during natural hazard events.

#### Policy 11.3.5 General risk management approach

For natural hazards and/or areas not addressed by policies 11.3.1, 11.3.2, and 11.3.3, subdivision, use or development of land shall be avoided if the risk from

recurrence interval (ARI) flood event. A 0.2% AEP event (used in the high hazard area definition) has a 0.2% (or 1 in 500) chance of occurring in any given year, so can also be described as a 500 year ARI flood event.

natural hazards is unacceptable. When determining whether risk is unacceptable, the following matters will be considered:

- 1. the likelihood of the natural hazard event; and
- 2. the potential consequence of the natural hazard event for: people and communities, property and infrastructure and the environment, and the emergency response organisations.

Where there is uncertainty in the likelihood or consequences of a natural hazard event, the local authority shall adopt a precautionary approach. Formal risk management techniques should be used, such as the Risk Management Standard (AS/NZS ISO 31000:2009) or the Structural Design Action Standard (AS/NZS 1170.0:2002).