

IN THE MATTER OF the Canterbury Earthquake
(Christchurch Replacement District Plan)
Order 2014

AND

IN THE MATTER OF the Stage 3 Natural Hazards Proposal

Date: 25 February 2016

MINUTE

Re (1) further mapping in regard to sea level rise and alternative associated activity classifications and other provisions (2) flood ponding management areas in established urban areas, and (3) permitted activities in rural areas affected by overlays

Introduction

[1] Prior to the adjournment of the hearing on Friday 26 February 2016, I informed the parties that a Minute would be issued giving directions for supplementary information sought by the Panel on the abovementioned matters.

[2] We emphasise that our requests do not invite any revisiting of the evidence we have received (nor any previous finding of the Hearings Panel, in earlier decisions). We have not reached any preliminary findings on any matters at this time and our requests do not indicate otherwise. As we have explained, we will in due course make timetabling directions for closing submissions on all matters. At this time, however, we seek the information requested in order to better assist our task of considering alternatives according to sections 32 and 32AA of the Resource Management Act 1991 ('RMA') and our other statutory responsibilities.

Mapping of further sea level rise scenarios and additional rule drafting

[3] These matters pertain to our consideration of the most appropriate provisions within High Flooding Hazard Management Areas ('HFHMA'). That is in view of the associated proposed

restrictions on the subdivision, use and development of land within the HFHMA. The Notified Proposal provides for only non-complying activity classification within the HFHMA (under proposed rule 5.8.8.2) for the following:

- (a) Any subdivision which creates an additional vacant allotment or allotments within a HFHMA (NC1); and
- (b) New buildings within a HFHMA (NC2).

[4] The reach of those restrictions is significant. In addition to impacting potential for intensification and development, it would also impose significant constraint on capacity to build houses on vacant lots, or even replacement houses for earthquake-damaged ones (for which existing use rights could also have expired where a house has been demolished some years ago). The uncontested evidence from the Council's economist, Mr Butcher, identifies significant cost consequences for impacted landowners. We have also heard several representations, and some evidence, from or on behalf of impacted landowners.

[5] Sections 32 and 32AA, RMA direct that we consider alternative planning approaches on a basis that assesses benefits and costs and also "the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions". Our evaluation of those matters needs to take careful and due account of any relevant directions given by objectives and policies of the NZCPS and CRPS in regard to natural hazard risks (including, in this context, the influence of climate change including sea level rise). That is, for instance, in the sense that we must give effect to the NZCPS (in regard to the coastal environment) and to the CRPS.

[6] Therefore, we intend to make directions to require from the Council the following:

- (a) A new set of HFHMA overlay maps showing the different HFHMA boundaries that would result from each of the following assumptions concerning sea level rise by 2115:
 - (i) A sea level rise of 1 metre (ie as is presently assumed for the Notified Proposal's overlay maps);

- (ii) A sea level rise of 0.5 metres (*adjusted as required to 2115*¹); and
 - (iii) A sea level rise of 0 metres;
- (b) A set of draft provisions such as to apply to the construction of any new or replacement dwelling or addition to a dwelling on residentially zoned land within the HFHMA to the effect of:
- (i) Classifying the activity as a restricted discretionary activity;
 - (ii) Specifying appropriate assessment matters (taking into consideration what we set out below);
 - (iii) Specifying any necessary associated policy provision for this activity class, i.e. to the extent that there is not already sufficient policy provision.

[7] We make clear that we ask for this information simply to help our consideration of alternative options. In that regard, we are simply calling on the Council to provide us with a mapping and drafting service. In the supplementary evidence or memorandum of counsel that the Council files in providing this information, it can express any riders it wishes to concerning its position on the information provided (and we will assume the Council's position is unchanged, unless otherwise stated).

[8] By way of brief explanation for why we seek this information, we make the following preliminary observations (subject to what we may further consider, in light of closing submissions):

- (a) The Higher Order Documents, and particularly the NZCPS and CRPS, would not appear to dictate an approach of avoidance for all new buildings in HFHMA, but rather to also allow for risk mitigation (depending, of course, on what is adjudged proportionate and the most appropriate response, in terms of the matters in ss 32 and 32AA). In particular, we refer to CRPS Policy 11.3.1 (as recently amended).

¹ See our comments at paragraph [8](d) below re the adjustment point.

- (b) We consider caution is needed when applying the CRPS Policy 11.3.1 concerning “high hazard areas”, especially where there are a range of different sources of potential hazard being accounted for with varying degrees of “risk to life”, including potentially no material risk. For instance, if the only or predominant risk is that arising from sea level rise over the next 100 years, actual risk to life could be relatively minimal, depending on the extent of sea level rise and associated inundation (as opposed to where there is also a 0.5% or higher AEP flood event risk). The various stated exceptions to Policy 11.3.1 would appear to make it relevant to try to account for those variabilities, particularly where we find that the single or predominant risk source is not of a character as would likely result in loss of life or serious injury in the period to 2115. Related to that, the definition of “high hazard areas”, for the purpose of Policy 11.3.1, does not assume that any degree of sea level rise through climate change or other influences is significant. Rather, the definition is of “land subject to sea water inundation (excluding tsunami) over the next 100 years”. What constitutes “inundation” is not defined. Does it connote a degree of flooding such as land being covered, or something less (e.g that stormwater and drain infrastructure would fail or require upgrading over time)? Also related, while we must “take into account” projections on the effects of climate change (including sea level rise) when determining high hazard areas, that duty allows us discretionary judgment on the weight we give to those projections, including for the purposes of our consideration of alternatives under ss 32 and 32AA.
- (c) Relevant to these matters, we note that the explanation to CRPS Policy 11.3.1 includes the following statements:

‘Development of land for most residential, industrial or commercial purposes is not sustainable in high hazard areas where natural events are most likely to occur. However, the policy acknowledges that, while potentially still adversely affected by natural hazard events, there may be some development that is appropriate in high hazard areas. Development that meets the criteria (1) to (4) will generally be low-intensity use such as forestry, farming, or recreational parks. These uses are less likely to suffer significant damage,

loss of life or require significant public expenditure on infrastructure remediation due to damage from a natural hazard event.

... The policy acknowledges that within Greater Christchurch significant investment and resources may exist within high hazard areas together with a greater consequence to life and property from the adverse effects of natural hazards. Climate change including Sea Level Rise is likely to exacerbate these adverse effects over time. Whether it is appropriate to avoid further development in high hazard areas including associated infrastructure and services will be guided by a number of factors. The policy also recognises the provisions of the New Zealand Coastal Policy Statement 2010.’

- (d) Our request for mapping on the assumption of a 0.5m sea level rise is made in light of the reference in the explanatory text to Issue 11.1.5 of the CRPS to planning for the effects of this level of sea level rise (and assessing effects of a 0.8m rise). We acknowledge that it states “to the year 2100”, whereas the direction in Policy 11.3.1 refers to “over the next 100 years”. As such, we consider adjustment to 2115 itself appropriate. Our request is also made in view of similar observations in the most recent Ministry for the Environment (‘MfE’) guideline (Exhibit C) and a November 2015 report by the Parliamentary Commissioner for the Environment (‘PCE’) (Exhibit B)². However, we appreciate that neither the MfE guideline nor the PCE report constitutes policy or other statutory direction.
- (e) It is important for us to know if the sole or predominant determiner of land being within the HFHMA is the assumption, based on projections, that it would be inundated by sea level rise. For that land, it is also important that we understand which proportion would be affected if the assumption was for a 0.5m rise (adjusted as required) to 2115, as opposed to an assumption of a 0.8 metre rise (adjusted to 1m) by 2115. That is in the sense that there are relative likelihoods or probabilities in each assumption (bearing in mind, also, that the RMA defines “effect” to encompass low probability but high potential impact potential effects). Therefore, the information we seek pertains to two matters we must determine:

² Preparing New Zealand for rising seas: certainty and uncertainty, November 2013

- (i) the geographic extent of the HFHMA; and
 - (ii) the restrictions on the subdivision, use and development of land to be applied within the HFHMA.
- (f) Our request does not seek or imply that we wish to revisit findings in our previous decisions, nor that we seek any further expert evidence on the matter of climate change, including sea level rise. Rather, as we have emphasised, within the directions given by the Higher Order Documents, we are simply concerned to ensure we can evaluate available planning responses in regard to the HFHMA regime before us at this stage.

[9] We appreciate that we have not asked for the drafting to extend to other classes of new building construction or to subdivision. That does not imply we have reached any view that it should not also extend to a wider range of activities. Whether or not that is appropriate will be a matter we will consider in due course, following closing submissions. However, parties should note that the natural hazard risks for people and communities of Christchurch, and other resource management issues, could well differ for different activities. For instance, we refer to the transcript for discussion on matters concerning intensification and, in relation to that, subdivision. We also refer to the findings on these matters in our Stage 1 decisions on the natural hazards and residential chapters³.

Flood Ponding Management Areas and related controls in established residential areas

[10] As sought, the Council has filed a Memorandum of Counsel further explaining its rationale for having Flood Ponding Management Areas ('FPMA') over established residential areas throughout Christchurch. The Council's Memorandum explains that:

- (a) FPMAs were modelled along the entire area that a 1 in 200 year flood would pond over given the current built form in Christchurch (including both residential and rural areas);

³ [xxx MMM please put in full reference to both Stage 1 decisions and dates]

- (b) FPMAs are intended to recognise that flooding will occur in extreme flood events and requires storage in both rural and residential areas (with any diminishment of this resulting in more flooding in peripheral and downstream developed areas in extreme events);
- (c) Floor levels of new houses are set above the 1 in 200 flood level in FPMAs, as they are elsewhere. Hence, houses will not themselves flood in such an event.
- (d) The Council recommends retaining the FPMA over properties where flooding would fall.

[11] In light of that explanation, we would like the Council to provide supplementary evidence to help us understand the extent, if any, to which the Council’s management of waterways (or want of management) has contributed to the FPMA encompassing private established residential properties. Specifically, we seek answers to the following:

- (a) Does the Council have a funded programme for stream maintenance for flood management purposes and is this being carried out; if not, why not?
- (b) Have these matters been accounted for in the modelling that produced the FPMA; if so, how and if not, why not?

[12] As the Memorandum correctly records, the matter was brought to light during submitter presentations, particularly that of Mr James Marshall (#3003), a property owner at 11 Kaiwara Street, Hoon Hay.

[13] Mr Marshall explained that his property is some 200mm below the road and has had a history of flooding during his time of ownership (he purchased it in 2003). He has taken steps to mitigate this, including arranging for a drainage easement through 198 Cashmere Road to reach a drain that runs along that boundary to rural land. He referred to major obstructions from river plantings and other things in the Heathcote River, in essence expressing concern that the Council’s failure to properly maintain that “spillway” was a significant contributor to flooding issues (a matter also traversed by another submitter, Mr Lee). Mr Marshall considered that this alleged lack of proper maintenance, combined with approvals of further

subdivision in the area, were significant causes of the flooding issues. As such, he took exception to being “caught up with ... changes” that pertain to what he is “allowed to do” concerning alterations to or increases in “the footprint of my property”.⁴ We took him to refer, in that regard, to the restrictions proposed over his property under the FPMA provisions.

[14] Whilst we appreciate that we could have determined the extent of FPMA coverage of established residential areas by studying the relevant overlay maps, we were surprised by what was revealed by Mr Marshall’s presentation given what relevant Council witnesses informed us. For instance, Mr Harrington commented that FPMA “are presently mainly rural within which water naturally ponds in major rainfall events”⁵. That would appear to be an understatement of the position concerning established residential properties, such as Mr Marshall’s. Only Ms Brookland (a modelling, rather than surface water planning, witness) offered any response to Mr Marshall’s written submission. That was simply to refer to it as part of a group of FPMA submitters where she recommended rejection of the relief sought⁶.

[15] In circumstances where submitters observe (and, in some cases, photograph) what appears to be a lack of maintenance or clearance of waterways (e.g. intrusion of large trees, clogging with weeds or other obstructions), it is understandable that they may also be suspicious that they are having to bear the costs of any Council waterway mismanagement. Specifically, that includes a perception that the geographic extent of the FPMA encompasses their residential properties in part because the Council is failing to maintain its waterways. While we make no findings on the validity or otherwise of those perceptions at this time, we note that they are potentially relevant to our evaluation of options under ss 32 and 32AA. As we have made clear to submitters during the hearing, we have no statutory authority to direct, or even recommend, that the Council undertakes any engineering works, including maintenance. However, our evaluation under ss 32 and 32AA is to consider both regulatory and non-regulatory methods (for instance, in this case engineering methods, including maintenance).

[16] In this case, it would at least appear theoretically possible that the extent of FPMA could be greater or less, depending on what related Council stream maintenance is or is not being

⁴ Transcript, page 484, lines 18 – 46, page 485, lines 1 – 33.

⁵ Evidence in chief of Graham James Harrington, at para 8.2.

⁶ Evidence in chief of Iris Brookland, at para 9.4

carried out. In any case, transparency on these matters is also important bearing in mind submitters' concerns.

[17] We are mindful that there is an element of distrust or suspicion in what submitters say, concerning the Council's action or lack of action on waterway maintenance. We encourage the Council to consider that dimension when determining whether the supplementary evidence should be simply from Council officers or also involve external review or input. We do not intend any criticism of either Mr Harrington or Ms Brookland in making that observation. Rather, it is simply in the interests of ensuring submitters' anxieties are acknowledged and respected.

[18] Depending on the supplementary evidence we receive on those questions, we may or may not consider it appropriate to further consider related activity classifications and restrictions on established residential areas that are specific to the FPMA (i.e. beyond those that would apply in any event, such as minimum floor level restrictions that apply within Flood Management Areas). We note, however, that we would anticipate that the Council is correct to observe that minimum floor levels would be set for new houses above the 1 in 200 flood level in FPMAs, as they are elsewhere (and we refer to our Stage 1 Natural Hazards decision on this matter).

[19] At this stage, our direction would be confined to the supplementary evidence we have sought.

Listed permitted activities in rural zones within the overlays

[20] Panel questioning of Mr Warren Lewis indicated that the Panel is presently concerned that the listed permitted activities for rural land within the HFHMA, FPMA and FMA overlays may not be sufficient to ensure normal farming activities can continue without unnecessary restriction, i.e. where doing so would not conflict with the intentions of the Higher Order Documents particularly in regard to natural hazard risk management. Relevant to that, at least for HFHMA, we refer to the observations made in the explanation to CRPS Policy 11.3.1 to the effect that farming could meet the exemptions to the policy, in terms of being a "low-intensity use" ... "less likely to suffer significant damage, loss of life or require significant public expenditure on infrastructure remediation due to damage from a natural hazard events".

[21] As directed during Panel questioning, Mr Lewis filed a memorandum setting out his thinking on a potential permitted activity rule for farming. Our initial impression is that this is relatively broad in its expression. We intend to direct the Council to provide us with its thinking, by memorandum or supplementary evidence.

Initial memorandum proposing timetable for responses and further steps

[22] We do not make the various directions on supplementary evidence and information in this Minute, as we consider it more reasonable to do so once the Council has had time to consider the resourcing and timing implications for doing so. Therefore, our direction below is confined to seeking from the Council a memorandum of counsel proposing a timetable for when it can provide this. Once we receive that, we will issue a further Minute with directions.

Directions

[23] I direct:

- (a) By **4pm Monday 7 March 2016**, the Council will file a memorandum:
 - (i) Proposing a timetable for provision to us of the information we seek, namely as to additional HFHMA maps and draft provision (para [6]), waterways management in relation to the proposed FPMA (para [11]) and permitted activities in rural zones within FHFMA, FPMA and FMA (paras [20] and [21]);
 - (ii) Explaining whether that information will be provided by further memorandum of counsel and/or supplementary evidence (and from whom).



Environment Judge John Hassan
Chair