DISTRICT PLAN COMMITTEE

<u>HEARINGS FOR PROPOSED PLAN CHANGE 6 –</u> <u>HUTT RIVER FLOOD HAZARD AREAS</u>

Minutes of a meeting of the District Plan Committee held in The Hutt City Council Chambers, Administration Building, 30 Laings Road, Lower Hutt on Monday 12 December 2005 and deliberations held on 12 December 2005.

<u>PRESENT:</u>	Cr RW Styles (Chair) Cr MJ Cousins Cr C Milne
<u>IN ATTENDANCE:</u>	E Albuquerque, Divisional Manager Environmental Policy & Approvals V Rodgers, Environmental Policy Analyst G Dick, Manager Flood Protection, Greater Wellington Regional Council D Atapattu, Engineer Flood Protection, Greater Wellington Regional Council JE Stevens, Senior Committee Advisor BS Collinge, Committee Advisor

In accordance with a delegation by Council, pursuant to the provisions of section 34 of the Resource Management Act 1991, the District Plan Committee had power to act in determination of Changes to the Operative District Plan for recommendation to Council following the hearing of submissions.

DISTRICT PLAN - CITY OF LOWER HUTT

<u>HEARINGS FOR PROPOSED PLAN CHANGE 6 –</u> <u>HUTT RIVER FLOOD HAZARD AREAS</u>

1. APPEARANCES

Submitter: Reginald Moore Ashley Roper **Represented by:** Reginald Moore Ashley Roper In addition correspondence from Burton Consultants on behalf of Transpower New Zealand Limited, and from Greater Wellington Regional Council, was tabled at the hearing.

2. THE HEARING

The parties who appeared presented additional written and oral submissions and statements of evidence. The hearing addressed matters raised in submissions and the further submission on Proposed District Plan Change 6 Hutt River Flood Hazard Areas. Volumes containing copies of all submissions and the further submission were available to all parties. A background report, specific comments and recommendations individually addressing all submissions and the further submission were pre circulated to all parties to the hearing.

3. DELIBERATIONS OF THE COMMITTEE

Introduction

Proposed District Plan Change 6 – Hutt River Flood Hazard Areas came about in response to the Hutt River Floodplain Management Plan. The proposed plan change updates, expands or introduces flood hazard information about the Hutt River contained in the General Residential, Suburban Commercial, General Business, Avalon Business, General Rural, General Recreation and River Recreation Activity Areas and Utilities, Natural Hazard and Earthworks sections of the District Plan. Policies and rules are included in the proposed plan change for areas within the City where landuse has the potential to be adversely affected by the Hutt River. The proposed plan change is limited to those areas immediately adjacent to the Hutt River or not protected by stopbanks at Belmont and the entrance to Stokes Valley.

Hutt River Floodplain Management Plan

The Hutt River Floodplain Management Plan (HRFMP) is the result of a joint effort by Greater Wellington Regional Council, Upper Hutt City Council and Hutt City Council. The HRFMP was published by Greater Wellington in 2001 and was prepared under the supervision of the Hutt River Advisory Committee, which comprises of Councillors from Greater Wellington Regional Council, Hutt City Council and Upper Hutt City Council and Iwi representatives. It is a document that is not specifically required under the Resource Management Act (RMA). However, it is a document that has assisted Council in formulating the proposed plan change. Preparing the HRFMP and the district plan change have been closely aligned to ensure that an integrated management approach has been taken and to ensure the purpose of the RMA is met. Without the preparation of the HRFMP it would have been difficult to support the inclusion of new policies and rules in the District Plan.

The HRFMP is a 40-year blue print for managing and implementing programmes that will gradually reduce flooding effects from the Hutt River. It summarises the structural and non-structural measures selected to help manage the flood hazard, and records the process undertaken to determine the measures. Alternative options that were investigated and rejected are also presented. The HRFMP includes policies supporting further development and implementation of the measures over the next 40 years, outlines the decision-making framework and broad community involvement process to achieve implementation, and provides direction for a monitoring strategy for the HRFMP's implementation and performance of measures.

Statutory Provisions

Part II of the RMA underpins the exercise of all functions, duties and powers. Section 5 is fundamental to any assessment. The approach in section 5 is to weigh the matters in section 5(2) in order to reach a broad judgement as to whether a policy or rule would promote the sustainable management of natural and physical resources.

Section 31 outlines the functions of the Council under the RMA and includes the control of any actual or potential effects of the use, development, or protection of land including for the purpose of avoidance or mitigation of natural hazards.

Section 74 requires the Council to change its plan in accordance with its functions under section 31, the provisions of Part II, its duty under section 32 and any regulations.

Section 76 enables the Council to include rules in the District Plan, for the purpose of carrying out its functions under the Act, and to achieve the objectives and policies of the Plan. In making a rule the Council:

"...shall have regard to the actual or potential effect on the environment of activities including, in particular, any adverse effect;...".

The following passage from the Environment Court decision *Wakatipu Environmental Society v Queenstown Lakes District Council (2000, NZRMA 59]* is applicable to a District Plan in general:

"A district plan must provide for the management of the use, development and protection of land and associated natural and physical resources. It must identify and then state (inter alia) the significant resource management issues, objectives, policies and proposed implementation methods for the district. In providing for those matters the territorial authority (and on any reference to the Environment Court) shall prepare its district plan in accordance with:

- *its functions under section 31;*
- *the provisions of Part II;*
- section 32;

• *any regulations;*

and must have regard to various statutory instruments."

The following passage from the Planning Tribunal's decision *Nugent v Auckland City Council (1996, NZRMA 481)* summarises the requirements derived from section 32(1):

"A rule in a proposed district plan has to be necessary in achieving the purpose of the Act, being the sustainable management of natural and physical resources (as those terms are defined); it has to assist the territorial authority to carry out its functions of control of actual or potential effects of the use, development or protection of land in order to achieve the purpose of the Act; it has to be the most appropriate means of exercising that function; and it has to have a purpose of achieving the objectives and policies of the plan."

Section 85 is also relevant to this plan change as it addresses compensation. The practical consequence of s 85(1) of the RMA is that the compensation provisions in the Public Works Act 1981 do not apply and property owners have no right to compensation if controls are imposed that are likely to affect their development potential. Section 85(2) RMA provides a remedy to challenge such a proposed rule by submissions on a new plan or plan change on the grounds that it would render an interest in land 'incapable of reasonable use'. Section 85(3) RMA provides an alternative remedy where a rule both "renders any land incapable of any use" and "places an unfair and unreasonable burden on any person having an interest in the land".

The Plan Change

The main features of this proposed Plan Change which include amendments to Issues, Objectives, Policies, Explanation and Reasons, Rules and Anticipated Environmental Results to chapters of the District Plan are as follows:

- (a) Buildings and structures on the riverside of the building setback line are not to be permitted activities.
- (b) Buildings and structures within the 1 in 100-year flood extent are to have floor levels raised above the 100-year flood level although minor additions and new accessory buildings (20m² or less) will be permitted activities subject to conditions.
- (c) Buildings and structures in the Primary or Secondary River Corridor that are 20m² or less and have a minimum setback of 20m or more from any flood protection structure will be permitted activities.

The proposed changes are outlined in detail in Appendix 1 attached to these decisions.

The River Corridor

The river corridor includes land immediately adjacent to the river. It is the minimum area able to contain a major flood and enable the water to pass safely to the sea. Due to its location, the river corridor represents a significant flooding and erosion hazard to people, buildings and structures, including the flood defences sited in the corridor. The river corridor extends from the river mouth to the Hutt Gorge. The outer limit is set by:

- The outside (landward) toe of all stopbanks;
- Geological features, including the valley walls and cliff top features;
- The extent of a 2800 cumec flood; and
- The riverside margin of existing houses at Belmont and Bridge Road, Birchville, where those properties extend into the erosion hazard area.

The river corridor comprises both primary and secondary areas. The primary river corridor includes areas of fast flowing water and areas that are prone to erosion. The secondary river corridor contains areas of fast flowing water, but the erosion risk is not as significant as in the primary river corridor.

Primary and Secondary River Corridors

The formulation of the Primary and Secondary River Corridor plans was supported by an array of technical information including:

- Historical river alignment information from 1936 to 1974 to identify the potential hazard;
- Topographical information to determine the flood extent and the location of cliff escarpments;
- Geological information to establish the nature and potential extent of cliff top erosion; and
- Estimates of flow depth and velocity of a 2800 cumec flood standard to define areas of relative flooding hazard.

The core flooding area separates the area of fast flowing water from the slower moving and often deeper water in the secondary river corridor. This separation has been done using a line where the product of depth and velocity is approximately equal to 1. The depth-velocity product in the core flooding area (included in the primary river corridor) is more than 1.

The threat to life and limb and to gross structural damage (i.e. houses being washed away) caused by floods depends largely upon the speed and depth of flood waters. It is accepted practice in New Zealand and overseas to use the depth-velocity product to determine the size of the flood hazard.

A depth-velocity product of 1 or more signifies areas where flood waters are fast flowing and possibly deep. The depth and speed of flood waters in this area are such that any development in the area could sustain major damage and there is potential danger to life. Water may rise rapidly, evacuation of people and their possessions would be extremely difficult, and social disruption and financial loss could be very high.

Most types of development in the river corridor have the potential to worsen the impact of flooding on other properties in the vicinity, posing a significant threat to the safety of flood defences. Even a partially blocked river corridor would cause a significant redistribution of flow, which is likely to adversely affect other areas. Therefore, the proposed plan change discourages buildings and structures in the river corridor.

The secondary river corridor hazard area represents the area of the river corridor where the velocity-depth product is less than 1. The secondary river corridor is an area of slower moving (compared to the core flooding area in the primary river corridor) water which is often deep. The secondary river corridor contains areas of fast flowing water, but the erosion risk is not as significant as in the primary river corridor.

1 in 100-year flood extent

A limited number of properties in Belmont and at the entrance to Stokes Valley have been identified as being within the 1 in 100-year flood extent, as these areas are not protected by stopbanks. A 100-year flood currently has the magnitude of approximately 1900 cumic metres of water per second measured at Taita. It has about a 1% chance of being equalled or exceeded in any one year.

A stopbank option was considered for Belmont, but the community preference was for bank edge protection works only, with no stopbank. It was considered by the community that a stopbank would obstruct views and adversely affect the amenity values of the area. A stopbank would also require property purchase affecting a number of private properties.

At Belmont, 32 houses are at risk of flooding in a 100-year flood event. The houses considered eligible for house raising assistance were those that would flood by more than 500 mm during a 100-year flood event. Discussions were held with individual property owners affected by house raising. At the conclusion of these discussions there was a general consensus that a partial stopbank should be constructed to protect houses in Norfolk Street rather than house raising.

For Norfolk Street in Belmont, a partial stopbank with a gap in it has been built across the road from east to west to the outside edge of the footpaths. The gap is able to be closed in a flood event by the use of gates. The key for the gates will be held by a resident of Norfolk Street, and Greater Wellington and Hutt City's emergency management departments. The community and Regional Council chose to have a gap in the stopbank due to the difficulties that would arise from stormwater flooding if the gap in the stopbank was permanently closed. Other reasons also included the potential adverse effects on the road and pedestrian crossings over the stopbank.

At Stokes Valley, there is currently a training bank, about 300 metres long, which protects the Stokes Valley stream outlet. This reduces the effect of Hutt River flood levels on the Stokes Valley stream discharge. Major structural works, groynes or rock lining and realignment of the river, would be required to strengthen this training bank to withstand the effects of a 100-year flood in the Hutt River. Private property purchase would also be required. Therefore, major structural works are not feasible at this location and not recommended in the HRFMP.

The proposed plan change requires all buildings and structures within the 1 in 100-year flood extent, including additions that are more than minor, to have floor levels constructed above the 1 in 100-year flood event. Minor additions or new accessory buildings of 20m² or less will be permitted.

Building Setback Line

This applies to Belmont where the land on the riverside of the line is at risk of erosion. Bank edge protection works have been undertaken to reduce the number of properties affected by erosion. As a result the building setback line affects a small part of approximately 6 properties, whereas prior to these works approximately 45 properties in Belmont were at risk from erosion.

The proposed plan change makes it a restricted discretionary activity for any building or structure located wholly or in part on the riverside of the building setback line.

Consultation

There has been a considerable amount of consultation undertaken over the years in developing the Hutt River Floodplain Management Plan. In terms of this plan change, there have been three public meetings that officers of both Councils attended. At one of these meetings Greater Wellington's property consultant and an insurance person were present to answer questions. In addition to public meetings, officers have met with individuals on site when requested and in all cases further investigations were carried out on those sites.

Submissions

Nine submissions were received on Proposed Plan Change 6 of which one has been subsequently withdrawn. Most of them were site specific. Issues addressed in the submissions include questioning the determination of specific sites within the Primary or Secondary River Corridor; the determination of the 1 in 100-year flood extent, proposing remedial works that could protect property in Stokes Valley and the relevance of the provisions of the Plan Change.

Conclusion

This plan change follows on from the Hutt River Floodplain Management Plan and is also consistent with the Natural Hazards chapter of the Regional Policy Statement. There are areas in Lower Hutt that are unprotected from flooding by the Hutt River in a 100-year flood event, and these areas need to be recognised and have controls in place for further development on these sites.

4. DECISIONS AND REASONS

DPC06/01 D1 - Greater Wellington Regional Council

Decision:

That the submission lodged by Greater Wellington Regional Council, supporting the Proposed Plan Change, be **accepted** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

The submission supports the Proposed Plan Change. The Hutt River Floodplain Management Plan (HRFMP) provides the river management context for the proposed District Plan changes. The HRFMP is a key tool for managing and implementing programmes that will gradually reduce flooding effects to the community and is consistent with policies and provisions in Greater Wellington's Regional Policy Statement.

DPC06/02 D1 - Brenda Helen van Maastricht

The submitter has formally withdrawn their submission in objection to Proposed Plan Change 6.

DPC06/03 D1 – Ewan Forbes

Decision:

That the submission lodged by Ewan Forbes, seeking adequate flood protection to Carter Street or alternatively requesting to be placed in a position equivalent to if no proposal existed, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

The Regional Council have completed works from Carter Street to Owen Street to protect properties from erosion by the Hutt River. However, despite these works, 32 houses at Belmont including the house at 3 Carter Street are subject to flooding and therefore need to have controls in place on further development. Under section 31 of the RMA it is the responsibility of Council to advise the public of known hazards in the area and avoid or mitigate these hazards where possible. Consequently, it is considered that the property cannot be placed in the position that existed prior to the determination of the 1 in 100-year flood extent.

As outlined in the Background Report, the investigations as part of the HRFMP concluded that a major stopbank protecting Belmont was neither practical nor viable. The community's preference was for edge protection works rather than a stopbank. A stopbank would obstruct views and adversely affect the amenity values of the area. A stopbank would also require property purchase affecting a number of private properties.

According to modelling, the house at No. 3 Carter Street would have 40 mm of floodwater above the house floor level during a 100-year event. The houses considered eligible for house raising assistance were those that would flood by more than 500 mm during a 100-year flood event. Therefore, this property was not considered for house raising assistance.

DPC06/03 D2 – Ewan Forbes

Decision:

That the submission lodged by Ewan Forbes, seeking to have the 20 square metre building area dropped or compensation sought for the restriction placed on his property, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

The 20m² threshold relates to a desire to permit some building as of right without the need to require a raised floor level. In setting the 20m² limit Council needed to determine at what point the potential adverse effects of the building on the flood hazard should be considered. It is considered that allowing development of 20m² would not significantly increase the flood hazard risk.

The RMA addresses compensation in section 85. The practical consequence of s 85(1) of the RMA is that the compensation provisions in the Public Works Act 1981 do not apply and property owners have no right to compensation if controls are imposed that are likely to affect their development potential. Section 85(2) of the RMA provides a remedy to challenge such a proposed rule by submissions on a new plan or plan change on the grounds that it would render an interest in land 'incapable of reasonable use'. Section 85(3) of the RMA provides an alternative remedy where a rule both "renders any land incapable of any use" and

"places an unfair and unreasonable burden on any person having an interest in the land". It is considered that the proposed rule does not meet either one of these two tests.

DPC06/04 D1 - RSK Limited

Decision:

That the submission lodged by RSK Limited, seeking that the status quo continue so that normal residential building can go ahead, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

As outlined in the Background Report, section 31 of the RMA delegates the District Council the responsibility to "control any actual or potential effects of the use, development, or protection of land, including for the purpose of the avoidance or mitigation of natural hazards". Therefore it is Council's obligation to advise the public of known hazards in the area and avoid or mitigate these hazards where possible. It is not appropriate to ignore or disregard this flood hazard information received from the Regional Council.

DPC06/05 D1 - Safeway Self Storage Limited

Decision:

That the submission lodged by Safeway Self Storage Ltd, seeking to exclude 61 Connolly Street from the proposed restriction on activities (buildings and structures) located within the Hutt River corridor; and/or amend Appendix A: Sheet 2 of 4 Sheets to exclude 61 Connolly Street from the Proposed Secondary River Corridor; and/or such further and/or alternative relief as may give effect to the matters raised in the submission, be **partially accepted** to the extent that the provisions of Proposed Plan Change 6 be changed for 61 Connolly Street (General Business Activity Area) as follows:

Issue – add as 2nd paragraph:

Areas not protected by flood protection structures are at risk of flooding by the Hutt River. The site at 61 Connolly Street (Lot 1 DP 87322 C.T.WN 54D/764) has in place flood protection measures and these measures need to be recognised and maintained to ensure flood hazard effects are properly managed.

Policy – add as (d):

(d) Flood protection measures at 61 Connolly Street (Lot 1 DP 87322 C.T.WN 54D/764) need to be established and maintained to ensure buildings and structures on site are protected from adverse flood hazard effects of the Hutt River.



Explanation and Reasons – add as 2nd paragraph:

The site at 61 Connolly Street (Lot 1 DP 87322 C.T.WN 54D/764) is within the Hutt River floodway as shown in the Hutt River Floodplain Management Plan. The site is currently well developed and has in place flood protection measures to avoid and mitigate the adverse flood hazard effects from the Hutt River. These measures need to be maintained so that the risk of flooding is minimal. Flood protection measures protecting the site to 10.1m above mean sea level (which is the 100-year flood level) will ensure that Hutt River flooding is mitigated.

Rule – add new rule (**p**):

(**p**) **61 Connolly Street**, Lot 1 DP 87322 C.T.WN 54D/764 (identified in Appendix General Business 4 – see Appendix 2 attached):

In addition to the other Permitted Activity Conditions, the following shall apply to the scheduled activities on this site:

- (i) The site must be protected from flooding by flood protection measures. The flood protection measures protecting the site from Hutt River flooding must be to a minimum level of 10.1m above mean sea level; and
- (ii) All buildings and structures must have a minimum floor level of 9.2m above mean sea level; and
- (iii) There must be at all times an operational mobile onsite water pump that will be used to manage surface water run-off.

Replace existing rule "(**p**) General Rules" as "(**q**) General Rules".

As a consequential amendment to these changes, the Secondary River Corridor annotation should be uplifted from the site at 61 Connolly Street, Lower Hutt.

Reason:

Safeway Self Storage Ltd has put in place measures to protect their site at 61 Connolly Street and it is considered that the measures should be recognised. The site has been raised to a level of RL 9.0 – 9.1m to facilitate building floor levels of RL 9.2m. As part of the detailed design of the buildings on the site, a perimeter wall has been formed with a top at RL 10.4m. The "lowest" part of the exterior barrier is at the entrance, which is at a level of RL 9.8 – 9.9m. The use of a mobile onsite water pump to manage surface water run-off and further flood protection measures to address the vulnerability at the entrance of the site will provide protection to 10.1m above sea level which is what is recommended by the Regional Council. Provided that these measures are established and maintained, the risk of flooding in a 100-year flood event is mitigated. Therefore, as a

result of consultation with the submitter, changes are proposed to be inserted into the Plan Change specifically for 61 Connolly Street.

DPC06/06 D1 - Transpower New Zealand Limited

Decision:

That the submission lodged by Transpower New Zealand Limited, seeking to retain all definitions, issues, objectives, policies, rules and explanation without further modification, particularly those relating to the proposed changes in Chapters 7, 13 and 14 of the District Plan, except for the definition of `flood protection structure' which should be amended to read:

"Flood Protection Structure – physical assets (including land) managed and maintained **or approved** by the Wellington Regional Council for the purpose of flood protection, such as stopbanks, flood gates, debris traps, river berms, bankedge works and plantings"

be **accepted** to the extent that the definition of `flood protection structure' is changed to read as follows:

"Flood Protection Structure – physical assets (including land) managed and maintained by the Wellington Regional Council or approved (including managed and maintained) by the Wellington Regional Council for the purpose of flood protection, such as stopbanks, flood gates, debris traps, river berms, bank-edge works and plantings."

Reason:

It is considered that those flood protection structures that are approved by the Wellington Regional Council should be included in the definition of flood protection structures (as opposed to just those that are managed and maintained by the Regional Council).

DPC06/06 D2 - Transpower New Zealand Limited

Decision:

That the submission lodged by Transpower New Zealand Limited, seeking to amend provision 7C 2.1(a) (and any other similar provision) so that it reads *"Works necessary for the management of any river or stream undertaken or approved by the Wellington Regional Council or Hutt City Council"*, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

The Wellington Regional Council is responsible for the flood management of rivers within Lower Hutt while Hutt City Council is responsible for the management of some streams in the district in accord with the "Administration of Watercourses Agreement" between Hutt City Council and the Regional Council. It is not appropriate for any other authority to be responsible for the flood management of rivers or streams in Lower Hutt. Another authority may manage the flood protection structures on their site, but they should not be managing any river or stream. Should Transpower wish to construct flood protection structures on their site, they can do so under the definition recommended above in DPC06/06 D1 but the Wellington Regional Council will retain management of the Hutt River.

In addition, this plan change is limited to the Hutt River and the implication of this request is that all rivers and streams in Lower Hutt would be affected. It is therefore considered to be outside the scope of this plan change.

DPC06/06 D3 - Transpower New Zealand Limited

Decision:

That the submission lodged by Transpower New Zealand Limited, seeking to ensure that the maintenance, operation and upgrading of existing lines over the Hutt River continues to be permitted, be **accepted** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

This plan change does not affect the rule relating to the maintenance, operation and minor upgrading of existing lines over the Hutt River.

DPC06/06 D4 - Transpower New Zealand Limited

Decision:

That the submission lodged by Transpower New Zealand Limited, seeking that any other such relief as to give effect to the submissions, be **accepted** to the extent that the provisions of Proposed Plan Change 6 are changed as outlined in the decision above in DPC06/06 D1.

Reason:

It is considered that the decision outlined above in DPC06/06 D1 provides appropriate relief to the submission.

DPC06/07 D1 – Simon Byrne

Decision:

That the submission lodged by Simon Byrne, seeking to omit or redefine the word "structure" as in "buildings and structures" to improve interpretation of the Plan and reduce ambiguity, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

The word 'structure' is defined in the District Plan with reference to 'building' as follows:

- (a) any fence not exceeding 2 metres in height;
- (b) any retaining wall not exceeding 1.2 metres in height;
- (c) satellite dishes with a diameter not exceeding 0.6m and antennas 2.5m above the maximum height permitted in the activity area or the rules in Chapter 13 Utilities;
- (d) all structures less than 1.2 metres in height and $20m^2$ in area;
- (e) all tents and marquees erected on a temporary basis for a period not exceeding 3 months;
- (f) all signs, as defined in this Plan."

The word 'structure' is also defined in the RMA. Thus, it is clearly defined and is not considered ambiguous. The term "buildings and structures" is consistently used in the District Plan and it would be inappropriate to omit the word 'structure' with reference to flood hazards and this plan change.

DPC06/08 D1 - Reginald Charles Moore

Decision:

That the submission lodged by Reginald Charles Moore, seeking that the maps be amended to show the true likely extent of flooding in a 1 in 100 year event, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

The Hutt River stopbanks protect the Hutt CBD and all residential areas from Hutt River flooding except for unprotected areas in Belmont, Stokes Valley, Hathaway Avenue and Seaview. Greater Wellington flood maps show 100-year flood extents for Belmont, Stokes Valley and Hathaway Avenue. Seaview area is affected by Waiwhetu Stream flooding and flood maps for this area are currently under preparation as part of the Waiwhetu Stream study. Greater Wellington's flood modelling has shown that stopbanks along the Hutt River are high enough to contain up to a 100-year flood event in the Hutt River. The Hutt River Floodplain Management Plan shows flood extents in the event of a stopbank breach. It is proposed to manage this residual flood risk in protected areas through emergency management measures and not by rules in the District Plan.

DPC06/09 D1 - Ashley Daryl Roper

Decision:

That the submission lodged by Ashley Daryl Roper, seeking that the Council dredge and remove the bottom 1 metre of riverbed to allow the 1 in 100-year flood to stay within the primary and secondary corridors, be

rejected to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

The Hutt River has a gravel bed which is constantly changing. Removing the bottom 1 metre of riverbed in an attempt to lower the flood level is not feasible and will not have any significant effect in lowering the flood levels. In addition, maintaining the river bed at lower levels in this reach will lead to river bank failure and also put structures (for example, the Pomare Rail Bridge foundation) at risk.

DPC06/09 D2 - Ashley Daryl Roper

Decision:

That the submission lodged by Ashley Daryl Roper, seeking that Council install groynes or barriers to ensure that the stopbank retains its integrity and is raised in height by the necessary 1 metre, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

At Stokes Valley there is currently a training bank, about 300 metres long, which protects the Stokes Valley stream outlet. This reduces the effect of Hutt River flood levels on the Stokes Valley stream discharge. Major structural works, groynes or rock lining and realignment of the river would be required to strengthen this training bank to withstand the effects of a 100-year flood in the Hutt River. However, major structural works are not feasible at this location and not recommended in the HRFMP.

DPC06/09 D3 - Ashley Daryl Roper

Decision:

That the submission lodged by Ashley Daryl Roper, seeking a combination of decisions 1 and 2 sought above, be **rejected** to the extent that the provisions of Proposed Plan Change 6 remain without change.

Reason:

As discussed in decisions DPC06/09 D1 and DPC06/09 D2, there are no practical proposals to protect the area from flooding.

Cr RW Styles CHAIR

CHANGES TO DISTRICT PLAN PROPOSED PLAN CHANGE 6

Changes to Chapter 1 - Introduction and scope of the Plan

Chapter 1, "Relationship of this plan to documents prepared by central and regional government". Make amendments to the following:

1. **Add heading and explanation** to "1.3(b) Regional Documents" the following:

"(vi) Hutt River Floodplain Management Plan

The Wellington Regional Council has produced the Hutt River Floodplain Management Plan. The Plan recognises the importance and influence of the river in terms of flood risk and the river's amenity values. Strategic solutions are proposed to manage the flood risk to the Hutt Valley. These solutions are of a structural (physical works) and non-structural (managing land use and development, and emergency management planning) nature together with an environmental strategy. The Plan is a framework for ongoing programmes."

Changes to Chapter 3 – Definitions

Chapter 3, "Definitions". Make amendments to the following:

2. Add to Chapter 3 the following definitions:

"Flood Protection Structure - physical assets (including land) managed and maintained by The Wellington Regional Council for the purpose of flood protection, such as stopbanks, flood gates, debris traps, river berms, bank-edge works and plantings."

"Flood Hazard - the potential for damage to property or people due to flooding and associated erosion."

"Flood Hazard Effects - the negative impacts of flooding caused by fast flowing or deep-ponded flood waters. Fast-flowing or ponded flood waters are dangerous for people, becoming more severe where floods affect urban areas. These effects also include damage to the flood protection system, and other structures and buildings by water and debris, or by erosion."

"River Corridor - includes land immediately adjacent to the river. It is the minimum area able to contain a major flood and enable the water to pass safely to the sea. Due to its location, the river corridor represents a significant flooding and erosion hazard to people, buildings and structures, including the flood defences, sited in the corridor. The river corridor comprises both primary and secondary areas."

"Primary River Corridor - contains fast flowing water and includes areas that are prone to erosion."

"Secondary River Corridor - contains fast flowing water, but the erosion risk is not as significant as the Primary River Corridor."

"Building Setback Line - land on the landward side of the building setback line is protected by flood protection structures up to a 100year flood event. Land on the riverside of the line is at risk of erosion from the Hutt River."

"100-Year Flood – a 100-year flood in the Hutt River is equal to a 1 in 100 year event and currently has a magnitude of approximately 1900 cubic metres of water per second measured at Taita. It has about a 1% chance of being equalled or exceeded in any one year."

"Building Floor Level – (in relation to flooding) means the underside of floor joist for timber structures or, for concrete slabs, shall be 150mm below the finished top of the slab."

Changes to Chapter 4 - Residential

Chapter 4A, "General Residential Activity Area". Make amendments to the following:

3. Add new 4A 1.2.2 "Heading", "Issue", "Objective", "Policies" and "Explanation and Reasons" as follows:

"<u>4A 1.2.2 Effects of the Hutt River Flood Hazard</u>

Issue

Areas not protected by flood protection structures are at a risk of flooding by the Hutt River. The size, scale and location of buildings and structures need to be managed to avoid or mitigate adverse flood hazard effects.

Objective

To avoid or mitigate adverse flood hazard effects on existing and new development within areas susceptible to a 100-year flood event from the Hutt River. Policies

(a) To ensure that all buildings and structures on sites immediately adjacent to the Hutt River (see planning map E3) are appropriately located to avoid damage from erosion hazards of the Hutt River.

(b) To ensure that all buildings and structures (including additions that are more than minor to existing buildings and structures) on sites identified within the 100-year flood extent have floor levels constructed above the 1 in 100-year flood event.

(c) To establish a maximum limit on area for additions to the gross floor area of existing buildings or structures as at 1 March 2005 on sites identified within the 100-year flood extent.

(d) That minor additions (not more than 20m²) to existing buildings and structures on sites identified within the 100-year flood extent are permitted.

(e) That all buildings and structures do not create adverse flood hazard effects for other land, buildings and structures off-site.

(f) That new accessory buildings on sites identified within the 100year flood extent are permitted, subject to a maximum gross floor area.

(g) To discourage the siting of buildings and structures in the Primary and Secondary River Corridors.

(h) To ensure that buildings and structures in the Primary or Secondary River Corridor of the Hutt River have no more than minor adverse effects on flood protection structures.

(i) To mitigate the effects of flood hazards on building and structures in the Primary and Secondary River Corridors by managing their location, size and scale.

(j) That any remaining risk that arises will be dealt with by emergency management procedures and other voluntary actions.

Explanation and Reasons

In established areas of the Hutt River corridor and floodplain it is accepted that appropriate development must be able to continue, although landowners and developers will be expected to reduce flood hazard effects to an acceptable level. These effects are described in the Hutt River Floodplain Management Plan. Buildings and structures need to be located so they are not in a position likely to subside as a result of erosion or flooding, damaging other buildings and structures such as flood protection structures in the river corridor.

Buildings and structures in the Primary or Secondary River Corridor of the Hutt River could adversely affect flood protection structures. Buildings and structures in the river corridor will also be subject to effects of fast flowing water, deep flooding and erosion. The outcomes identified in the Hutt River Floodplain Management Plan are relevant and should be taken into account in any assessment of effects. It is important that buildings and structures are discouraged in the Primary and Secondary River Corridors. It is therefore appropriate to control the location of buildings and structures.

In order to ensure that flood hazard effects are managed, minimum conditions are specified.

Emergency management procedures and other voluntary actions will be initiated in the event of severe flooding in an effort to minimise the damage to properties and prevent injury and loss of life to people.

(a) Building Setback Line

A building setback line (see planning map E3) has been established to ensure that all buildings and structures on properties immediately adjacent to the Hutt River are not located in a position where they are at risk from erosion by the Hutt River. Land on the riverside of the line could be subject to erosion over time due to the flow, velocity and meander patterns of the Hutt River. Buildings and structures on the riverside of the line require a resource consent. Buildings and structures on the landward side of the line that comply with the Permitted Activity Conditions for the General Residential Activity Area do not require a resource consent. At Belmont, erosion protection works have been undertaken on the riverside of the building setback line. These works have substantially increased the protection to Belmont from erosion. The remaining level of risk from erosion is now low when compared to an unprotected bank, though Council must manage this risk through appropriate rules in the District Plan and emergency management procedures.

(b) Floor levels

A limited number of properties in Belmont and at the entrance to Stokes Valley have been identified as being within the 100-year flood extent (see planning maps D3, E3, G1). These properties are not protected by stopbanks. All buildings and structures, including additions that are more than minor, are required to have floor levels constructed above the 1 in 100-year flood event. This floor level is to minimise the flood hazard effects to buildings and structures up to a 100-year flood event. Council must manage the flood risk through appropriate rules in the District Plan and emergency management procedures.

Minor additions to existing buildings and structures not in excess of 20m² gross floor area are permitted at existing floor levels for properties within the 100-year flood extent. New accessory buildings not in excess of 20m² gross floor area are also permitted. The 20m² threshold relates to a desire to permit some building as of right without the need to require a raised floor level. In setting the 20m² limit Council needed to determine at what point the potential adverse effects of the buildings, on the flood hazard should be considered. It is considered that allowing development of 20m² would not significantly increase the flood hazard risk."

4. Add to Rule 4A 2.1.1 "Permitted Activities – Conditions" the following:

"(w) Sites in Belmont that contain the building setback line (see planning map E3):

No part of any building or structure shall be constructed on the riverside of the building setback line.

(x) Buildings and structures within the 1 in 100-year flood extent (see planning maps D3, E3 and G1):

In addition to the other Permitted Activity Conditions, the following shall apply in this area:

- (i) All buildings and structures shall have a floor level above the 1 in 100-year flood level; except:
- (ii) Minor additions to existing buildings and structures are a Permitted Activity provided:
 - the floor level of additions is not below the floor level of the existing building or structure; and
 - the gross floor area of all additions does not exceed 20m² to the gross floor area of the building or structure existing as at 1 March 2005.
- (iii) New accessory buildings shall not exceed a total gross floor area of 20m².

(y) Primary and Secondary River Corridors

All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area of 20m² or less and with a setback of 20m or more from a flood protection structure."

5. Add to Rule 4A 2.3 "Restricted Discretionary Activities" the following:

- "(f) All buildings and structures that are sited wholly or in part on the riverside of the building setback line in Belmont.
- (g) All buildings and structures within the 1 in 100-year flood extent that do not comply with the Permitted Activity Conditions for floor levels or total gross floor area.
- (h) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure."
- 6. **Add** to "Matters in which Council has Restricted its Discretion and Standards and Terms" the following:

"(f) All buildings and structures that are sited wholly or in part on the riverside of the building setback line in Belmont.

(i) In assessing proposals, Council will be guided by the degree to which buildings and structures further increase:

- The risk to people of exposure to the erosion hazard; and

- Any mitigation measures that are proposed.

(g) All buildings and structures within the 1 in 100-year flood extent that do not comply with the Permitted Activity Conditions for floor levels or total gross floor area.

(i) In assessing proposals, Council will be guided by the degree to which buildings and structures further increase:

- The risk to people of exposure to the flood hazard; and

- The flood hazard effects for land, buildings and structures off-site.

(h) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure.

- Proximity of buildings and structures to flood protection structures;

- Adverse effects of the flood hazard on buildings and structures and on flood protection structures; and

- The risk to people of exposure to the flooding and erosion hazard."

7. Add to 4A 3 "Anticipated Environmental Results" the following:

"(g) To protect buildings and structures from potential erosion and flooding of land by the Hutt River.

(h) The scale, size and location of buildings and structures will have adverse effects which are no more than minor on flood protection structures.

(i) The adverse effects on buildings and structures in the Primary and Secondary River Corridors will be avoided or mitigated."

Changes to Chapter 5 - Commercial

Chapter 5C, "Suburban Commercial Activity Area". Make amendments to the following:

8. Add new 5C 1.2.3 "Heading", "Issue", "Objective", "Policies" and "Explanation and Reasons" as follows:

"5C 1.2.3 Effects of the Hutt River Flood Hazard

Issue

Areas not protected by flood protection structures are at a risk of flooding by the Hutt River. The size, scale and location of buildings and structures need to be managed to avoid or mitigate adverse flood hazard effects.

Objective

To avoid or mitigate adverse flood hazard effects on existing and new development within areas susceptible to a 100-year flood event from the Hutt River.

Policies

(a) To ensure that all buildings and structures (including additions that are more than minor to existing buildings and structures) on sites identified within the 100-year flood extent have floor levels constructed above the 1 in 100-year flood event.

(b) To establish a maximum limit on area for additions to the gross floor area of existing buildings or structures as at 1 March 2005 on sites identified within the 100-year flood extent.

(c) That minor additions (not more than 20m²) to existing buildings and structures on sites identified within the 100-year flood extent are permitted.

(d) That all buildings and structures do not create adverse flood hazard effects for other land, buildings and structures off-site.

(e) That new accessory buildings on sites identified within the 100year flood extent are permitted, subject to a maximum gross floor area. (f) That any remaining risk that arises will be dealt with by emergency management procedures and other voluntary actions.

Explanation and Reasons

In established areas of the Hutt River corridor and floodplain it is accepted that appropriate development must be able to continue, although landowners and developers will be expected to reduce flood hazard effects to an acceptable level. These effects are described in the Hutt River Floodplain Management Plan. Buildings and structures need to be located so they are not in a position likely to subside as a result of erosion or flooding, damaging other buildings and structures such as flood protection structures in the river corridor.

In order to ensure that flood hazard effects are managed, minimum conditions are specified.

Emergency management procedures and other voluntary actions will be initiated in the event of severe flooding in an effort to minimise the damage to properties and prevent injury and loss of life to people.

(a) Floor levels

A limited area at the entrance to Stokes Valley has been identified as being within the 100-year flood extent (see planning map G1). This area is not protected by a stopbank. All buildings and structures, including additions that are more than minor, are required to have floor levels constructed above the 1 in 100-year flood event. This floor level is to minimise the flood hazard effects to buildings and structures up to a 100-year flood event. Council must manage the flood risk through appropriate rules in the District Plan and emergency management procedures.

Minor additions to existing buildings and structures not in excess of 20m² gross floor area are permitted at existing floor levels for properties within the 100-year flood extent. New accessory buildings not in excess of 20m² gross floor area are also permitted. The 20m² threshold relates to a desire to permit some building as of right without the need to require a raised floor level. In setting the 20m² limit Council needed to determine at what point the potential adverse effects of the buildings, on the flood hazard should be considered. It is considered that allowing development of 20m² would not significantly increase the flood hazard risk."

9. Add to Rule 5C 2.1.1 "Permitted Activity – Conditions" the following:

"(n) Buildings and structures within the 1 in 100-year flood extent (see planning map G1):

In addition to the other Permitted Activity Conditions, the following shall apply in this area:

- (i) All buildings and structures shall have a floor level above the 1 in 100-year flood level; except:
- (ii) Minor additions to existing buildings and structures are a Permitted Activity provided:
 - the floor level of additions is not below the floor level of the existing building or structure; and
 - the gross floor area of all additions does not exceed 20m² to the gross floor area of the building or structure existing as at 1 March 2005.
- (iii) New accessory buildings shall not exceed a total gross floor area of 20m².

And renumber Rule 5C 2.1.1 (n) General Rules to (o) General Rules."

10. **Add** to **Rule** 5C 2.2 "Restricted Discretionary Activities" the following:

"(d) All buildings and structures within the 1 in 100-year flood extent that do not comply with the Permitted Activity Conditions for floor levels or total gross floor area."

11. Add to "Matters in which Council has Restricted its Discretion and Standards and Terms" the following:
"(d) All buildings and structures within the 1 in 100-year flood extent that do not comply with the Permitted Activity Conditions for floor levels or total gross floor area.
(i) In assessing proposals, Council will be guided by the degree to which buildings and structures further increase:

The risk to people of exposure to the flood hazard; andThe flood hazard effects for land, buildings and structures off-

- site."
- 12. Add to 5C 3 "Anticipated Environmental Results" the following:"(d) To protect buildings and structures from potential flooding of land by the Hutt River.

(e) The scale, size and location of buildings and structures will have adverse effects which are no more than minor on flood protection structures."

Changes to Chapter 6 - Business

Chapter 6A, "General Business Activity Area". Make amendments to the following:

13. **Add** new 6A 1.2.3 "Heading", "Issue", "Objective", "Policies" and "Explanation and Reasons" as follows:

"6A 1.2.3 Effects of the Hutt River Flood Hazard

Issue

Buildings and structures within the Primary or Secondary River Corridor of the Hutt River are subject to flood hazard effects and can also have adverse effects on flood protection structures. The size, scale and location of buildings and structures need to be managed to avoid or mitigate these adverse effects.

Objectives

To avoid or mitigate adverse flood hazard effects on buildings and structures.

To avoid or mitigate adverse flood hazard effects on flood protection structures.

Policies

(a) To discourage the siting of buildings and structures in the Primary and Secondary River Corridors.

(b) To ensure that buildings and structures in the Primary or Secondary River Corridor of the Hutt River have no more than minor adverse effects on flood protection structures.

(c) To mitigate the effects of flood hazards on buildings and structures in the Primary and Secondary River Corridors by managing their location, size and scale.

Explanation and Reasons

Buildings and structures which are inappropriately located can have adverse effects on adjoining activities. Buildings and structures in the Primary or Secondary River Corridor of the Hutt River could adversely affect flood protection structures. Buildings and structures in the river corridor will also be subject to effects of fast flowing water, deep flooding and erosion. The outcomes identified in the Hutt River Floodplain Management Plan are relevant and should be taken into account in any assessment of effects. It is important that buildings and structures are discouraged in the Primary and Secondary River Corridors. It is therefore appropriate to control the location of buildings and structures.

In order to ensure that flood hazard effects are managed, minimum conditions are specified."

14. Add to Rule 6A 2.1.1 "(b) Setback Requirements" the following:

"All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area of 20m² or less and with a setback of 20m or more from a flood protection structure."

15. Add to Rule 6A 2.3 "Restricted Discretionary Activities" the following:

"(h) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than $20m^2$ or with a setback less than 20m from a flood protection structure."

16. **Add** to "Matters in which Council has Restricted its Discretion and Standards and Terms" the following:

"(h) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure.

- Proximity of buildings and structures to flood protection structures; and
- Adverse effects of the flood hazard on buildings and structures and on flood protection structures."
- 17. **Add** to 6A 3 "Anticipated Environmental Results" the following:

"(f) The scale, size and location of buildings and structures will have adverse effects which are no more than minor on flood protection structures.

(g) The adverse effects on buildings and structures in the Primary and Secondary River Corridors will be avoided or mitigated."

Chapter 6C, "Avalon Business Activity Area". Make amendments to the following:

18. **Add** new 6C 1.2.2 "Heading", "Issue", "Objective", "Policies" and "Explanation and Reasons" as follows:

"6C 1.2.2 Effects of the Hutt River Flood Hazard

Issue

Buildings and structures within the Secondary River Corridor of the Hutt River can have adverse effects on flood protection structures. The size, scale and location of buildings and structures need to be managed to avoid or mitigate these adverse effects.

Objective

To avoid or mitigate adverse flood hazard effects on flood protection structures.

Policies

(a) To discourage the siting of buildings and structures in the Secondary River Corridor.

(b) To ensure that buildings and structures in the Secondary River Corridor of the Hutt River have no more than minor adverse effects on flood protection structures.

Explanation and Reasons

Buildings and structures which are inappropriately located can have adverse effects on adjoining activities. Buildings and structures in the Secondary River Corridor of the Hutt River could adversely affect flood protection structures. The outcomes identified in the Hutt River Floodplain Management Plan are relevant and should be taken into account in any assessment of effects. It is important that buildings and structures are discouraged in the Secondary River Corridor. It is therefore appropriate to control the location of buildings and structures.

In order to ensure that flood hazard effects are managed, minimum conditions are specified."

19. Add to Rule 6C 2.1.1 "Permitted Activities – Conditions" the following:

"(n) Secondary River Corridor

All new buildings and structures or additions in the Secondary River Corridor with a gross floor area of 20m² or less and with a setback of 20m or more from a flood protection structure.

And renumber Rule 6C 2.1.1 (n) General Rules to (o) General Rules."

20. Add to Rule 6C 2.2 "Restricted Discretionary Activities" the following:

"(c) All new buildings and structures or additions in the Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure."

21. **Add** to "Matters in which Council has Restricted its Discretion and Standards and Terms" the following:

"(c) All new buildings and structures or additions in the Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure.

- Proximity of buildings and structures to flood protection structures; and
- Adverse effects on flood protection structures."
- 22. Add to 6C 3 "Anticipated Environmental Results" the following:

"(d) The scale, size and location of buildings and structures will have adverse effects which are no more than minor on flood protection structures."

Changes to Chapter 7 - Recreation and Open Space

Chapter 7A, "General Recreation Activity Area". Make amendments to the following:

23. Add to 7A 1.2.1 "Issue" as the second to last sentence the following:

"Buildings and structures within the Primary or Secondary River Corridor of the Hutt River are subject to flood hazard effects and can also have adverse effects on flood protection structures."

24. Add to 7A 1.2.1 "Policies" the following:

"(f) To mitigate the effects of flood hazards on buildings and structures in the Primary and Secondary River Corridors by managing their location, size and scale.

(g) To discourage the siting of buildings and structures in the Primary and Secondary River Corridors.

(h) To ensure that buildings and structures in the Primary or Secondary River Corridor of the Hutt River have no more than minor adverse effects on flood protection structures."

25. **Amend** second paragraph of "Explanation and Reasons" as follows:

"Buildings and structures which are inappropriately located can have adverse effects on adjoining activities. Buildings and structures in the Primary or Secondary River Corridor of the Hutt River could adversely affect flood protection structures. Buildings and structures in the river corridor will also be subject to effects of fast flowing water, deep flooding and erosion. The outcomes identified in the Hutt River Floodplain Management Plan are relevant and should be taken into account in any assessment of effects. It is important that buildings and structures are discouraged in the Primary and Secondary River Corridors. It is therefore appropriate to control the location of buildings and structures."

26. Add new 7A 1.2.2 "Heading", "Issue", "Objective", "Policies" and "Explanation and Reasons" as follows:

"7A 1.2.2 Effects of the Hutt River Flood Hazard

Issue

Areas not protected by flood protection structures are at a risk of flooding by the Hutt River. The size, scale and location of buildings and structures need to be managed to avoid or mitigate adverse flood hazard effects.

Objective

To avoid or mitigate adverse flood hazard effects on new development within areas susceptible to a 100-year flood event from the Hutt River.

Policies

(a) To ensure that all buildings and structures on sites identified within the 100-year flood extent have floor levels constructed above the 1 in 100-year flood event.

(b) That all buildings and structures do not create adverse flood hazard effects for other land, buildings and structures off-site.

(c) That any remaining risk that arises will be dealt with by emergency management procedures and other voluntary actions.

Explanation and Reasons

Buildings and structures need to be located so they are not in a position likely to subside as a result of erosion or flooding, damaging other buildings and structures such as flood protection structures in the river corridor. In order to ensure that flood hazard effects are managed, minimum conditions are specified.

Emergency management procedures and other voluntary actions will be initiated in the event of severe flooding in an effort to minimise the damage to properties and prevent injury and loss of life to people.

(a) Floor levels

A limited area at the entrance to Stokes Valley has been identified as being within the 100-year flood extent (see planning map G1). This area is not protected by a stopbank. All buildings and structures are required to have floor levels constructed above the 1 in 100-year flood event. This floor level is to minimise the flood hazard effects to buildings and structures up to a 100-year flood event. Council must manage the flood risk through appropriate rules in the District Plan and emergency management procedures.

27. **Add** to **Rule** 7A 2.1.1 "(d) Building Coverage and Size of Structures" the following:

"(iv) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area of 20m² or less and with a setback of 20m or more from a flood protection structure."

28. Add new Rule 7A 2.1.1 as follows:

"(k) Buildings and Structures within the 1 in 100-year flood extent (see planning map G1):

In addition to the other Permitted Activity Conditions, the following shall apply in this area:

(i) All buildings and structures shall have a floor level above the 1 in 100-year flood level.

And renumber (k) General Rules to (l) General Rules."

29. Add to Rule 7A 2.2 "Restricted Discretionary Activities" the following:

"(e) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure.

(f) All buildings and structures within the 1 in 100-year flood extent that do not comply with the Permitted Activity Conditions for floor levels."

30. **Add** to "Matters in which Council has Restricted its Discretion and Standards and Terms" the following:

"(e) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure.

Proximity of buildings and structures to flood protection structures; and

Adverse effects of the flood hazard on buildings and structures and on flood protection structures.

(f) All buildings and structures within the 1 in 100-year flood extent that do not comply with the Permitted Activity Conditions for floor levels.

(i) In assessing proposals, Council will be guided by the degree to which buildings and structures further increase:

- The risk to people of exposure to the flood hazard; and
- The flood hazard effects for land, buildings and structures off-site."
- 31. **Amend** and **add** to 7A 3 "Anticipated Environmental Results" the following:

"(c) The scale, size, location and external appearance of buildings and structures will have adverse effects which are no more than minor on amenity values and flood protection structures.

(d) Adverse effects of recreation activities on adjoining flood protection structures will be avoided, remedied or mitigated.

(e) The adverse effects on buildings and structures in the Primary and Secondary Rivers Corridors will be avoided or mitigated.

(f) To protect buildings and structures from potential flooding of land by the Hutt River."

Chapter 7C – River Recreation Activity Area. Make amendments to the following:

32. Add to 7C 1.1.3 "Issue" as the first two sentences as follows:

"The River Recreation Activity Area that is contained within the Primary and Secondary River Corridors is exposed to a significant flood hazard. Activities need to avoid or mitigate potential adverse flood hazard effects associated with these higher-risk areas."

33. **Amend** policy (a) 7C 1.1.3 "Policies" as follows:

"To ensure that recreation activities on the surface of rivers and margins have *no more than minor* adverse effects on flood protection structures."

34. **Add** to 7C 1.1.3 "Policies" the following:

"(e) To ensure that any other activities in the Primary or Secondary River Corridor of the Hutt River have no more than minor adverse effects on flood protection structures." 35. **Add** to 7C 1.1.3 "Explanation and Reasons" as the second paragraph the following:

"Activities in the Primary or Secondary River Corridor of the Hutt River could adversely affect flood protection structures. Additionally, there is the possibility of people being put at risk by activities that allow them to live, work or congregate in the activity area. It is important that any activity in the Primary or Secondary River Corridor shall mitigate adverse effects. The outcomes identified in the Hutt River Floodplain Management Plan are relevant and should be taken into account in any assessment of effects."

Changes to Chapter 8 – Rural

Chapter 8B, "General Rural Activity Area". Make amendments to the following:

- 36. Amend 8B 1.2.1 "Objective" as follows:"To recognise those elements within the site that determine the character, amenity values and adverse effects of flood hazards of rural areas and manage them appropriately."
- 37. Add to 8B 1.2.1 "Policies" the following:"(e) To discourage the siting of buildings and structures in the Primary and Secondary River Corridors.

(f) To ensure that buildings and structures in the Primary or Secondary River Corridor of the Hutt River have no more than minor adverse effects on flood protection structures.

(g) To mitigate the effects of flood hazards on buildings and structures in the Primary and Secondary River Corridors by managing their location, size and scale."

38. **Amend** 1st sentence of "Explanation and Reasons" as follows:

"Minimum conditions which determine when and where buildings are located on a site contribute to the character, amenity values and adverse effects of flood hazards of rural areas."

- 39. **Correct** typo in 3rd sentence of "Explanation and Reasons" from "an site" to "a site".
- 40. **Add** as 2nd paragraph to "Explanations and Reasons" the following:

"Buildings and structures in the Primary or Secondary River Corridor of the Hutt River could adversely affect flood protection structures. Buildings and structures in the river corridor will also be subject to effects of fast flowing water, deep flooding and erosion. The outcomes identified in the Hutt River Floodplain Management Plan are relevant and should be taken into account in any assessment of effects. It is important that buildings and structures are discouraged in the Primary and Secondary River Corridors. It is therefore appropriate to control the location of buildings and structures."

41. Add to Rule 8B 2.1.1 "Permitted Activities – Conditions" the following:

"(t) Primary and Secondary River Corridors

All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area of 20m² or less and with a setback of 20m or more from a flood protection structure."

42. Add to Rule 8B 2.2 "Restricted Discretionary Activities" the following:

"(i) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure."

43. **Add** to "Matters in which Council has Restricted its Discretion and Standards and Terms" the following:

"(i) All new buildings and structures or additions in the Primary or Secondary River Corridor with a gross floor area greater than 20m² or with a setback less than 20m from a flood protection structure.

- Proximity of buildings and structures to flood protection structures; and
- Adverse effects of the flood hazard on buildings and structures and on flood protection structures."
- 44. Add to 8B 3 "Anticipated Environmental Results" as follows:

"(f) The scale, size and location of buildings and structures will have adverse effects which are no more than minor on amenity values and flood protection structures.

(g) The adverse effects on buildings and structures in the Primary and Secondary Rivers Corridors will be avoided or mitigated."

Changes to Chapter 13 – Utilities

Chapter 13 "Utilities". Make amendments to the following:

45. **Add** to 13.1.1 "Policies" the following:

"(**k**) Where practicable, economic and technically feasible, electricity transformers and water pumping stations should not be located within the Primary or Secondary River Corridor of the Hutt River."

46. **Add** to 9th paragraph of 13.1.1 "Explanation and Reasons" the following:

"It is generally inappropriate for electricity transformers and water pumping stations to be located within the Primary and Secondary River Corridors of the Hutt River, to minimise the possibility of disruption to service after a flood event."

47. **Add** to Rule 13.2.3 "Discretionary Activities" the following:

"(h) In all activity areas, electricity transformers and water pumping stations in the Primary or Secondary River Corridor of the Hutt River."

48. Add to "Assessment Matter for Discretionary Activities" the following:

"(**q**) The likely impact on electricity transformers and water pumping stations, and therefore the provision of those services to the City, in a flood event.

(r) The likely impact of new roads on floodplain management."

Changes to Chapter 14 – General Rules

Chapter 14H, "Natural Hazards". Make amendments to the following:

- 49. **Amend** 14H 1.1.1 Policies (b), (d), (e) by replacing "civil defence" with "emergency management".
- 50. **Amend** last sentence of first paragraph "Explanation and Reasons (a) Risk and Vulnerability" as follows:

"Vulnerability can be reduced by various measures, including the provision of information, avoiding at-risk areas, maintaining a low intensity of development in at-risk areas or managing development in other ways to mitigate risks, providing insurance programmes, and by constructing physical protection measures."

51. **Replace** "Explanation and Reasons (d) Flood Hazard – Hutt River" with the following:

"(i) The Hutt River:

Physical protection measures are used for the Hutt River. These include dredging at the river mouth, groynes, channel control and stopbanks. Physical protection works are planned to be upgraded during the next 40 years, under The Hutt River Floodplain Management Plan (HRFMP). This is in response to the current standard of many stopbanks and bank edge protection works that would put a large part of the Hutt Valley floodplain at risk of flooding in a major flood event.

District Plan measures are used in the Primary and Secondary River Corridors and in parts of the Hutt Valley floodplain, that are not protected from major floods by the existing stopbanks or those proposed to be upgraded under the HRFMP. This land forms a narrow margin either side of the Hutt River, including parts of Belmont and Stokes Valley. The Seaview area is also affected by flooding however this area was not investigated in detail as part of the HRFMP, as it is also affected by flooding from the Waiwhetu Stream. The Wellington Regional Council and Hutt City Council are currently investigating the Waiwhetu Stream. Seaview flooding extents will be further investigated on completion of the Waiwhetu Stream investigation.

Any activities located within the Primary or Secondary River Corridors or other unprotected areas are susceptible to flooding which includes the effects of inundation and erosion. It is accepted that development must be able to continue in those areas that have already been developed, although landowners and developers will be expected to mitigate flood hazard effects to an acceptable level. For example, it is necessary for proposed buildings or structures greater than 20m² within the 100-year flood extent to raise floor levels to above the 100-year flood event. Proposed buildings and structures will also be required to be located to avoid damage from erosion hazards or be structurally strengthened to withstand the effects of severe erosion and high flood flow velocities.

The location of the following activities in the Primary or Secondary River Corridor or in areas not protected from major flooding by the existing stopbanks will not be appropriate:

- significant buildings where people work, live or congregate; such as schools, emergency services, hospitals, rest homes, holiday accommodation high-density residential developments and extensive commercial development.

These types of activities may expose people and assets to an unacceptable risk, or impose unacceptable costs on the community. Other activities such as earthworks, and accessory buildings and structures will also be required to avoid, remedy or mitigate the adverse flood hazard effects adequately. Adverse effects include, but are not limited to, erosion of the site or any part of a building, inundation and effects on other land and structures off-site. These effects may be cumulative or one-off in nature.

The Primary and Secondary River Corridors and those parts of the Hutt River Floodplain affected by flooding and erosion in a 100year flood event are identified in the Map Volume of the District Plan. The height of floor levels for buildings and structures within the 100-year flood extent shall be above the 100-year flood level. This height is determined by the location of the proposed building in relation to a modelled flood level. The Wellington Regional Council has information on the Hutt River Floodplain, which will assist in determining an appropriate height for floor levels of buildings.

In addition to the District Plan measures, information on flood prone sites are given in Land Information Memoranda, and all Building Consents require a minimum floor level for all new development to be above the 50-year flood level.

While engineering works for flood defence can reduce the risk of flooding, they can never eliminate it completely. In the event of the stopbanks being over-topped or breached, the implementation of emergency management procedures may be necessary. Therefore, it is important that Hutt City residents are aware of the flood hazard, and prepare themselves for flooding should it occur."

Chapter 14I "Earthworks". Make amendments to the following:

52. Add new 14I 1.4 "Heading", "Issue", "Objective", "Policy" and "Explanation and Reasons" as follows:

"14I 1.4 Primary and Secondary River Corridors

Issue

Earthworks can adversely affect flood protection structures in the Primary and Secondary River Corridors of the Hutt River. It is therefore necessary that these adverse effects are avoided or mitigated.

Objective

To ensure earthworks in the Primary or Secondary River Corridor of the Hutt River do not affect adversely flood protection structures.

Policy

To ensure that earthworks in the Primary or Secondary River Corridor have no more than minor adverse effects on flood protection structures. Explanation and Reasons

Earthworks in the Primary or Secondary River Corridor of the Hutt River can have adverse effects on flood protection structures by affecting the river's flow, velocity and meander patterns. The outcomes of the Hutt River Floodplain Management Plan are relevant and should be taken into account in any assessment of effects. It is important that earthworks do not occur near flood protection structures. It is therefore appropriate to control the location of earthworks."

53. **Add** to **Rule** 14I 2.1.1 as follows:

"(d) In the Primary and Secondary River Corridors, earthworks must be a minimum distance of 20m from a flood protection structure."

54. Add to Rule 14I 2.2.1 (a) "Matters in which Council has Restricted its Discretion and Standards and Terms" (iv) Natural Hazards as follows:

"In the Primary and Secondary River Corridors of the Hutt River, consideration should be given to the effects on the flood protection structures."