

Agenda Attachment ??2

8 RECOGNITION AND REDUCTION OF HAZARD POTENTIAL CONTENTS

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8 RECOGNITION AND REDUCTION OF HAZARD POTENTIAL

Wanganui District is affected by a number of natural hazards. Parts of the urban area are particularly prone to flooding, while the coast and hill country are affected by land instability and erosion. The District is also dissected by fault lines and is vulnerable to sea level rise and tsunamis. The natural hazards occurring within the District have an impact on current and future development. They can cause loss of human life and significant damage to private property, roads and other District assets. They can also cause damage to the natural environment.

In addition to natural events, hazards are associated with hazardous facilities, ie the storage, use and transportation of hazardous substances. These facilities are commonly found in both the rural and urban parts of the District. Hazardous substances, like agricultural sprays, industrial chemicals or fuel, have properties which are, or when in contact with air or water are, potentially flammable or explosive, and toxic. If hazardous facilities are not located appropriately or managed properly, the accidental release of, or loss of control of, hazardous substances can cause short or long term damage to human health and contamination of land, water, air, or damage to ecosystems.

It is recognised that while a hazard may be present, the hazard potential is only realised when there are land use activities, buildings or structures and important natural values in the vicinity of the hazard. It is not possible to eliminate hazards, but it is possible to manage the location, design and operation of land use activities and hazardous facilities to avoid, remedy or mitigate the potential adverse effects of hazards on human life, property and the environment.

The Resource Management Act requires both the Regional and the District Councils to share responsibility for the natural hazards of flooding, subsidence, and seismic, volcanic and tsunami hazards; and for hazardous substances. The Regional Policy Statement further defines the appropriate management responsibilities of local authorities for natural hazards and hazardous substances.

8.1 ISSUES

8.1.1 Variety of natural hazards.

The Wanganui District is affected by a number of natural hazards. The most significant ones are flooding, storms, tsunamis, erosion and earthquakes. Knowledge of the location and characteristics of natural hazards and their impacts on surrounding development and the

environment is far from comprehensive. This along with lack of public awareness hinders the avoidance and mitigation of those hazards.

8.1.2 Inappropriate land use in areas at risk of natural hazards.

Inappropriate land use and occupation of areas at risk from earthquake, flooding, ponding land instability can cause unnecessary risks for people and property.

8.2 OBJECTIVES

8.2.1 Informed community of natural hazard risks.

A community informed about the potential risks of natural hazards to people and property in the Wanganui District.

8.2.2 Avoiding and mitigating natural hazards.

The risks of natural hazards through inappropriate subdivision and development are avoided or mitigated whilst minimising adverse effects on natural, cultural and ecological values.

8.3 POLICIES

8.3.1 Promote improved understanding of natural hazards.

Promote improved understanding of natural hazards as development constraints and better knowledge and awareness of the risks to people and property in the Wanganui district.

8.3.2 Protection from natural hazards.

Avoid or minimise risk of loss of life or injury or environmental damage due to use or development in hazard prone areas.

8.3.3 Natural Hazard precautionary approach.

Adopt a precautionary approach in relation to use or development affected by potential natural hazards, especially where hazards are not well understood or the effects of natural processes are difficult to assess or where the effect of activities on natural hazards are not well understood.

8.3.4 Geotechnical report.

In assessing resource consents Council will require confirmation, including as appropriate the preparation of a geotechnical report, as to the suitability of the site for subdivision, use or development and that the effects of the hazard shall be avoided, remedied, mitigated.

8.3.5 Land instability.

Identify areas susceptible to land instability where assessment of the hazard risk is required before land use or subdivision activities are carried

out. Where there is an unacceptable geotechnical risk consent shall be declined.

8.4 RULES - LAND STABILITY ASSESSMENT AREAS

This section contains the rules that apply to activities in the Land Stability Assessment Areas, which covers areas of land instability within the urban area of Wanganui. There are two “Land Stability Assessment Areas”.

Investigation of the extent of the land within the Wanganui District at risk of land slip has identified a list of areas which are priorities for further study. These areas will be examined to identify the extent of susceptibility to land instability hazards. These hazard prone areas will be incorporated into the Land Stability Assessment Areas as investigations are completed.

~~Two~~ Five areas have been investigated and the following reports prepared:

- Hillside Stability Study – Anzac Parade/Putiki Drive, June 2011;
- Shakespeare Cliff, Wanganui – Building Line Restriction, Amended Report, November 2012.
- Land Stability Assessment Areas – Ikitara Road, Bastia Hill and Durie Hill, Risk Study Report, May 2014

The potential risks to people and property resulting from any future development in these areas will be managed through the Plan to achieve sustainable management.

Future research relating to potential land instability will focus on the following remaining areas:

~~• Ikitara Road area~~

- Mowhanau
- Roberts Ave/Paterson St
- Parkdale/Christies Hill/Virginia Road
- Putiki Areas
- Marybank Area

Within the Land Stability Assessment Areas instability and damage may occur from natural erosion processes or from activities which are incompatible with the soft rock of these escarpments. These erosive processes may lead to slips and consequent loss of property and landscape.

The purpose of the Land Stability Assessment Area is to recognise its potentially hazardous characteristics and ensure that effects from

incompatible activities causing or accelerating natural erosion, are avoided or mitigated.

8.4.1 Permitted Activities.

The following are permitted activities:

- a. Any activity permitted in an underlying zone and not excluded by Rules 8.4.2, 8.4.3, 8.4.4 or 8.4.5.
- b. Maintenance and minor upgrading of existing network utility facilities (excluding excavation or trenching).

8.4.2 Controlled Activities.

The following are controlled activities provided Rule 8.5.1 is complied with:

- a. Excavation, construction, alteration or modification to any structure or retaining wall.

Council limits its control to the following matter:

- i. Implementation of conditions to ensure that the excavation and construction, alteration or modification to any structure or retaining wall does not worsen or accelerate the risk of land instability on the site or surrounding area.
- b. Network utilities involving excavation, trenching or construction to any structure or retaining wall.

Council limits its control to the following matter:

- i. Implementation of conditions to ensure that the excavation and construction of any structure or retaining wall does not worsen or accelerate the risk of or level of erosion on the site or surrounding area.
- c. Vegetation clearance (greater than 5m² area annually).

Council limits its control to the following matter:

- i. Implementation of conditions to ensure that the activity does not worsen or accelerate the risk of or level of erosion on the site or surrounding area.

8.4.3 Restricted Discretionary Activities.

The following are restricted discretionary activities provided Rule 8.5.1 is complied with:

- a. Any restricted discretionary activity in an underlying zone and not excluded by Rules 8.4.4 or 8.4.5.

Council restricts its discretion to the matters identified in the underlying zone for the proposed activity.

- i. whether the activity contributes to land instability.

- b. Subdivision for boundary adjustment where no additional building platforms are created.

Council restricts its discretion to the matters identified in the underlying zone for the proposed activity (this includes the matters Council has limited its control to for subdivision in the Outer Commercial zone) where applicable.

- i. whether the subdivision contributes to land instability.

8.4.4 Discretionary Activities.

The following are discretionary activities:

- a. Any discretionary activity in an underlying zone not excluded by Rule 8.4.5.
- b. Subdivision where additional building platforms are created within Area B and where Rule 8.5.1 is complied with.
- c. Vegetation clearance (greater than 5m² area annually), where Rule 8.5.1 is not complied with.

8.4.5 Non-Complying Activities.

The following are non-complying activities:

- a. Excavation where Rule 8.5.1 is not complied with.
- b. Subdivision where additional building platforms are created within Area A, or where Rule 8.5.1 is not complied with for sites in Area B.
- c. Construction, alteration or modification of any structure or retaining wall where Rule 8.5.1 is not complied with.
- d. Network utilities involving excavation, trenching or construction of any structure or retaining wall where Rule 8.5.1 is not complied with.
- e. Any other activity which is not provided for as a permitted, controlled or discretionary activity.

8.5 PERFORMANCE STANDARDS

8.5.1 Geotechnical Report.

Where required by rules 8.4.2, 8.4.3, 8.4.4 or 8.4.5, the person proposing to undertake the activity shall provide Council with a report from a suitably qualified and experienced geotechnical engineer, prior to commencement of any works onsite. Council shall consider this rule is complied with where the report confirms that:

1. the risk of the activity is no more than low, using the qualitative risk assessment process described in 'Practice Note Guidelines for Landslide Risk Management 2007' (Australian Geomechanics Society, 2007).
2. associated works will not worsen or accelerate land instability on the site or surrounding area.

Note: Council shall maintain a list of suitably qualified and experienced geotechnical engineers.

8.6 ~~RULES - HILLSIDE PROTECTION ZONE~~

~~This chapter contains the rules which apply to activities in the Hillside Protection zone, which covers an areas of land instability within the urban area of Wanganui. It covers a significant part of the hillside north of the Bastia Tower, above Turoa Road and below Mount View Road (refer to Planning Map U16).~~

~~Within Hillside Protection zones, instability and damage may occur from natural erosion processes or from activities which are incompatible with the soft rock of these escarpments. These erosive processes may lead to slips and consequent loss of property and landscape.~~

~~The purpose of the Hillside Protection zone is to recognise its hazardous characteristics and ensure that effects from incompatible activities causing or accelerating natural erosion, are avoided.~~

8.6.1 ~~Permitted Activities.~~

~~The following are permitted activities in the Hillside Protection zone:~~

- ~~a. Reserves and open space.~~
- ~~b. Sheep farming.~~
- ~~c. Soil conservation works and plantings.~~
- ~~d. Network utilities as provided by District Wide Rule 10.1 which contains some exemptions from the zone rules for network utilities.~~

~~Which comply with the relevant performance standards below.~~

8.6.2 Restricted Discretionary Activities.

The following are restricted discretionary activities in the Hillside Protection zone:

- a. Clearance of land except the removal of plant pests. Discretion is restricted to:
 - i. whether the clearing of land contributes to soil instability,
 - ii. whether the clearing of land contributes to the control of noxious weeds,
 - iii. whether the clearing of land shall ensure fire protection.

Note: The Regional Council should be consulted with regards to any proposed soil disturbance activities in the Hillside Protection zone, as other resource consent requirements may apply.

8.6.3 Discretionary Activities.

The following are discretionary activities in the Hillside Protection zone:

- a. Subdivision.
- b. Structures relating to any permitted activities.
- c. Network utilities as provided by District Wide Rule 10.1.

8.6.4 Non-Complying Activities.

The following are non-complying activities in the Hillside Protection zone:

- a. Excavation of land.
- b. Any other activity which is not provided for as a permitted controlled or discretionary activity.

8.7 PERFORMANCE STANDARDS

8.7.1 Noise.

Sound emissions shall not exceed the following limits when measured on, or within, the boundary of any other site zoned Residential:

7am to 6pm	50 dBA(L10)	
All other times	40 dBA(L10)	Lmax: the lower of L95 background sound plus 30 dBA or 70 dBA

The above noise standards shall not apply to temporary military training activities as these activities are subject to separate standards contained in District Wide Rule 10.8.

These conditions shall be read with and are subject to the provisions of Appendix D – Noise.

8.7.2 — Light.

~~Any particular artificial lighting system shall not result in increased luminance in excess of 8 lux in the measured ambient level in the vertical plane at the windows of any residential building in the Residential, Rural or Rural Settlement zones. No light source shall cause glare which may adversely affect the vision of motorists on a road.~~

8.7.3 — Vibration.

~~No activity shall cause a vibration considered offensive or objectionable.~~

~~In assessing whether vibration is offensive or objectionable, the limits set in NZS 2631: 1985-1989, Parts 1 - 3 shall be used.~~

8.7.4 — Air discharge.

~~Note: There are no District Plan standards for air discharges. Discharges to air are controlled by regional councils. The Wanganui District Council has been authorised by the Manawatu-Wanganui Regional Council to exercise all powers and functions of Enforcement Officers for the purpose of investigating complaints about the discharge of contaminants to air within the boundary of the Wanganui urban area. Persons responsible for causing discharges to air should consult Wanganui District Council or Manawatu-Wanganui Regional Council staff about provisions in the Regional Air Plan for Manawatu-Wanganui. Furthermore, it should be noted that Section 17 of the Resource Management Act imposes a duty on all persons to avoid, remedy or mitigate adverse effects, including those relating to odour, dust and smoke, regardless of any rules in plans or conditions of resource consents.~~

8.7.5 — Hazardous substances.

~~Any new or expanded hazardous facility is subject to the provisions of Appendix F “Hazardous facility screening procedure”.~~